



**6712-01**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Parts 1 and 27**

**[WT Docket No. 18-120; FCC 19-62]**

**Transforming the 2.5 GHz Band**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** In this document, the Federal Communications Commission (Commission or FCC) takes another step towards making more mid-band spectrum available for next generation wireless services benefitting all Americans. Specifically, the Commission transforms the regulatory framework governing the 2.5 GHz band (2496-2690 MHz), which is the single largest band of contiguous spectrum below 3 gigahertz.

**DATES:** Effective **[INSERT DATE 184 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, except for amendments to §§ 27.14(u) and (v) and 27.1204, which are effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**FOR FURTHER INFORMATION CONTACT:** John Schauble of the Wireless Telecommunications Bureau, Broadband Division, at (202) 418-0797 or [John.Schauble@fcc.gov](mailto:John.Schauble@fcc.gov). For information regarding the PRA information collection requirements contained in this PRA, contact Cathy Williams, Office of Managing Director, at (202) 418-2918 or [Cathy.Williams@fcc.gov](mailto:Cathy.Williams@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Report and Order, WT Docket No. 18-120, FCC 19-62, adopted on July 10, 2019 and released on July 11, 2019. The complete text of this document is available for public inspection and copying from 8 a.m. to 4:30 p.m. Eastern Time (ET) Monday through Thursday or from 8 a.m. to 11:30 a.m. ET on Fridays in the FCC Reference Information Center, 445 12<sup>th</sup> Street S.W., Room CY-A257, Washington, DC 20554. The complete text is available on the

Commission's Web site at <https://docs.fcc.gov/public/attachments/FCC-19-62A1.pdf>, or by using the search function on the ECFS Web page at <http://www.fcc.gov/cgb/ecfs/>. Alternative formats are available to persons with disabilities by sending an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or by calling the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (tty).

### **Final Regulatory Flexibility Analysis**

The Regulatory Flexibility Act (RFA) requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." Accordingly, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this *Report and Order* on small entities. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rulemaking (NPRM)* released in May 2018 in this proceeding (83 FR 26396, June 7, 2018). The Commission sought written public comment on the proposals in the *NPRM*, including comments on the IRFA. No comments were filed addressing the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

### **Paperwork Reduction Act**

The requirements in §§ 27.14(u) and 27.1204 constitute new or modified collections subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. They will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, the Commission notes that, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), the Commission previously sought, but did not receive, specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25

employees. The Commission describes impacts that might affect small businesses, which includes more businesses with fewer than 25 employees, in the Final Regulatory Flexibility Analysis.

### **Congressional Review Act**

The Commission will send a copy of this Report & Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act. *See* 5 U.S.C. 801(a)(1)(A). In addition, the Commission will send a copy of the *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Report and Order*, and FRFA (or summaries thereof) will also be published in the Federal Register.

## **I. INTRODUCTION**

1. In this *Report and Order*, the Commission takes another step towards implementing its comprehensive strategy to make additional high-band, mid-band, and low-band spectrum available for next generation wireless services. Specifically, the Commission transforms the regulatory framework governing the 2.5 GHz band (2496-2690 MHz), which is the single largest band of contiguous spectrum below 3 gigahertz. Too much of this spectrum, which is prime spectrum for next generation mobile operations, including 5G, has lain fallow for more than twenty years. In order to move this spectrum into the hands of those who will provide service, including 5G, to Americans across the country, and particularly in rural and Tribal areas, the Commission is replacing an outdated regulatory regime, developed in the days when educational TV was the only use envisioned for this spectrum, with one that not only gives incumbent users more flexibility in how they use the spectrum, but also provides opportunities for additional entities to obtain access to unused 2.5 GHz spectrum. Importantly, the reforms the Commission adopts in this *Report and Order* will make valuable mid-band spectrum available for the mobile services on which consumers increasingly rely and which is critical to maintaining American leadership in the next generation of wireless connectivity.

## **II. BACKGROUND**

2. The 2.5 GHz band, which extends from 2496 to 2690 MHz, is comprised of 20 channels designated for Educational Broadband Service (EBS), 13 channels designated for commercial Broadband Radio Service (BRS), and a number of small guard band channels. EBS licensees are authorized to operate on the A, B, C, D, and G channel groups, with each group comprised of three 5.5 megahertz-wide channels in the lower or upper band segment and one 6 megahertz-wide channel in the middle band segment. Currently, there are 1,300 EBS licensees holding 2,193 licenses.

3. Only specified entities are eligible to hold an EBS license, specifically (1) accredited public and private educational institutions, (2) governmental organizations engaged in the formal education of enrolled students, and (3) nonprofit organizations whose purpose is educational and include providing educational and instructional television materials to accredited institutions and governmental organizations.

4. The Commission rules permit EBS licensees to lease their excess capacity to non-educational entities to use for non-educational purposes. And most EBS licensees do so. There are 2,087 active leases of EBS spectrum, compared with 2,193 licenses.

5. There are special requirements applicable to EBS excess capacity leases that do not apply in other services. Because the Commission's rules require EBS licensees to use their spectrum to further their educational missions, any excess capacity lease entered into by an EBS licensee must reserve a minimum of 5% of its spectrum capacity for the licensee/lessor and the licensee must use that capacity to provide 20 hours of educational usage per channel per week. Under existing rules, the Commission generally prohibits EBS licensees from leasing their facilities for a term longer than 30 years. Also, lessees are required to provide EBS lessors with the opportunity to revisit their lease terms at years 15, 20, and 25 to review their "educational use requirements in light of changes in educational needs, technology, and other relevant factors and to obtain access to such additional services, capacity,

support, and/or equipment as the parties shall agree upon in the spectrum leasing arrangement to advance the EBS licensee’s educational mission.” Those rules do not apply to leases that were entered into before January 10, 2005; such leases were grandfathered under the previous ITFS rules, which allowed a term of no more than fifteen years.

6. EBS presents two special challenges which are largely not present in other bands: a long-standing failure to make spectrum available, particularly in rural areas, and an unusual licensing scheme. Incumbent EBS licenses cover only about one half of the geographic area of the United States in any given channel. The 2.5 GHz spectrum remains largely unassigned in much of the rest of the country, especially in rural areas west of the Mississippi River.

7. The Commission suspended the processing of applications for new EBS licenses (and for major changes to existing EBS licenses) in 1993. Since then, the Commission has only opened two filing windows for EBS applications—in 1995, for new construction permits and major changes to existing EBS facilities, and in 1996, to allow for the filing of EBS modification applications and amendments to pending EBS applications proposing to co-locate with an authorized wireless cable facility. Thus, the last regular opportunity to apply for a new EBS license was in 1995.

8. In general, each EBS license is based on a circular Geographic Service Area (GSA) with a 35-mile radius (with an area of approximately 3,850 square miles). Due to a historical license modification process the Commission adopted in 2005, however, many EBS licenses have much smaller, irregular GSAs. Specifically, many EBS licenses had their 35-mile radius circles reduced when the Commission converted their Protected Service Areas (PSAs) to GSAs through the “splitting-the-football” process.<sup>1</sup>

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<sup>1</sup> “Splitting-the-football” refers to a process initially used informally by licensees in the MDS and ITFS industry to handle interference issues in GSAs that overlap. (“The area for incumbent site-based licensees that is bounded by a

9. On May 10, 2018, the Commission released the *Notice of Proposed Rulemaking (NPRM)*, 83 FR 26396, in this proceeding that explored ways to make this unused spectrum available for more flexible use to facilitate the deployment of next generation wireless services, including 5G, to all Americans. The *NPRM* proposed to rationalize the geographic service areas of EBS licenses and to provide additional flexibility to current EBS licensees in the use of the spectrum. It also sought comment on opening up priority windows for access to the spectrum by certain groups, such as Tribal Nations; and it proposed to assign the remaining white space through geographic area licenses for commercial use subject to competitive bidding; and sought comment on regulatory requirements for new EBS licensees.

10. The Commission received 304 comments (including express comments) and 29 reply comments on the *NPRM*.

### **III. DISCUSSION**

11. To further the Commission's goal of ensuring that this fallow spectrum is used to provide high-speed broadband service, particularly in rural areas, the Commission moves quickly to assign the remaining spectrum in this band to those who will use it to provide service.<sup>2</sup> Specifically, the Commission will hold a Tribal priority window to enable Tribal nations an opportunity to obtain 2.5 GHz licenses to provide service on rural Tribal lands. This window will be followed immediately by a system of competitive bidding for the remaining white spaces. In conjunction with the Commission's effort to

circle having a 35 mile radius and centered at the station's reference coordinates, which was the previous PSA entitled to incumbent licensees prior to January 10, 2005, and is bounded by the chord(s) drawn between intersection points of the licensee's previous 35-mile PSA and those of respective adjacent market, co-channel licensees.").

<sup>2</sup> On May 13, 2019, SHLB, NACEPF, Mobile Beacon, Voqal, National Digital Inclusion Alliance and Public Knowledge filed a request that the Commission seek further comment and delay a decision in this proceeding. *See* SHLB, NACEPF, Mobile Beacon, Voqal, National Digital Inclusion Alliance and Public Knowledge May 13 *Ex Parte*, *see also* Dept. of Ed. June 7 *Ex Parte* at 8. Further delay in this proceeding is not warranted. All parties have had ample opportunity to provide information through comments, reply comments, and *ex parte* presentations. Indeed, SHLB and its partners were free to provide economic analysis and information on educational use at the comment or reply comment stage. The actions the Commission takes was clearly identified in the *NPRM*. Given the critical need to make additional mid-band spectrum available, it is entirely appropriate to act now.

quickly license the remaining spectrum in this band to entities that will use it, the Commission also will replace the outdated regulatory regime for EBS with one of flexible use, thus making this valuable mid-band spectrum more available for advanced wireless services, including 5G.

**A. Rationalizing Incumbent 2.5 GHz Band Holdings**

12. The Commission takes a series of steps to provide existing EBS licensees with additional flexibility. First, in order to provide EBS licensees with additional flexibility and to facilitate the most efficient use of the EBS spectrum through a market-based mechanism, the Commission adopts the *NPRM*'s proposal to eliminate the EBS eligibility requirements, including for licenses granted via waiver of the filing freeze. Second, as part of the Commission's efforts to remove unnecessary regulatory barriers and align the EBS licenses with the flexible use policies used in similar spectrum bands, the Commission adopts its proposal in the *NPRM* to eliminate the educational use requirements for EBS licenses. Third, the Commission adopts the *NPRM*'s proposal to eliminate restrictions on EBS leases entered into under its Secondary Markets policies on a going forward basis. The Commission clarifies that nothing in its decisions is intended to affect or change the terms of any private contractual arrangement or any provisions in existing leases. Finally, the Commission declines to adopt the *NPRM*'s proposal to rationalize incumbent licenses to align with pre-existing geographic areas.

**1. Eliminating Eligibility Restrictions**

13. As noted by commenters that support elimination of the eligibility restrictions, eliminating eligibility restrictions will promote more efficient use of the spectrum, improve the industry's ability to attract capital, and make this spectrum more appealing for commercial operators to include in their long-term service plans. Therefore, once the rules become effective, both incumbent EBS licenses and new EBS licenses once issued will be free of the eligibility restrictions, and EBS licensees may assign or transfer their licenses freely. In taking this step, the Commission better aligns these licenses with the flexible use licensing policies used in similar spectrum bands, which generally feature

open eligibility. Moreover, taking this step is also consistent with the Commission's historical progression of granting increasing flexibility to EBS licensees, which has been an effective means of promoting more efficient use of the 2.5 GHz band.

14. The circumstances that led to the creation of a dedicated educational service no longer exist. Substantial technological changes over the last 30 years enable any educator with a broadband connection to access a myriad of educational resources—a content distribution model that does not require dedicated educational spectrum licensed to educational institutions. Only a handful of EBS licensees have deployed their own networks or use their EBS licenses in a way that requires dedicated spectrum. Instead, most licensees rely on lessees to deploy and operate broadband networks and use the leases as a source for revenues or devices. Moreover, as noted below, there are a multiplicity of other sources of educational programming available to institutions with broadband connections. All of these factors support eliminating the eligibility restrictions at this time.

15. The Commission does not believe that eliminating EBS eligibility restrictions will result in negative consequences for the educational community. Despite some claims to the contrary, eliminating eligibility requirements will not disrupt existing arrangements. Granting incumbent licensees additional flexibility to transfer or assign their licenses will not affect existing leases because: (1) the decision about whether to lease or transfer or assign a license remains with the EBS licensee, and (2) the Commission's actions in this *Report and Order* do not affect the validity of existing leases and other contractual arrangements. The services currently provided by EBS licensees will continue uninterrupted, including those provided by Mobile Beacon and Mobile Citizen pursuant to their leases with Sprint, unless the parties themselves decide otherwise. The Commission is not persuaded that eliminating the eligibility restrictions will jeopardize the public-private partnerships promoted by the Commission's leasing rules that have facilitated the construction of networks, which have benefitted both the educational institutions and their network partners. Providing additional flexibility to



incumbent EBS licensees by eliminating the eligibility restrictions will help ensure that the licensee retains control of decisions about how the license is to be used, including decisions about whether, under what terms, and to whom to transfer or assign the license. Incumbent EBS licensees that wish to retain their licenses<sup>3</sup> and continue participating in public-private partnerships may do so; incumbent EBS licensees that wish to transfer or assign their licenses will now have greater ability to do so.

16. The Commission therefore rejects as speculative and unpersuasive the assertions of some commenters that eliminating eligibility restrictions will lead to existing EBS licensees' losing negotiating leverage and will give commercial entities the incentive and ability to offer licensees unfavorable sale terms rather than new or renewed leases. For the same reasons, the Commission rejects allegations that permitting transfer or assignment of incumbent EBS licensees will hurt education generally, even if it benefits individual licensees. Providing licensees with additional flexibility to transfer or assign their licenses gives them greater power to put the licenses to use in the manner that suits their educational objectives. The Commission expects that incumbent licensees will make decisions about assigning or transferring their licenses based on the best interests of their educational institution.

17. Contrary to the concerns of some commenters, the Commission does not believe that continuing to apply EBS eligibility restrictions is necessary to ensure that commercial entities meet the needs of underserved communities. Appropriate performance requirements, such as those adopted

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<sup>3</sup> The Commission cautions incumbent EBS licensees concerning the eligibility and other requirements of its existing EBS rules, including the licensee's educational purposes, the provision of educational and instructional television material to accredited institutions and government organizations, the reception and use by receive sites of the licensee's educational usage, the specific additional obligations of nonlocal applicants, and the minimum 5% reservation of channel capacity. 47 CFR 27.1201(a), 27.1214. Based on recent allegations that several national, non-profit licensees have not complied with the Commission's eligibility and other rules, *see, e.g.*, Letter from Commissioner Brendan Carr to George Bott, President, Rockne Educational TV (July 3, 2019), the Commission directs the Wireless Telecommunications Bureau and the Enforcement Bureau to investigate such allegations and take appropriate action based on their findings.

herein, can ensure that licensees actually use their spectrum to offer service. Moreover, nothing in this proceeding affects the ability of commercial entities to provide broadband to entities eligible for E-Rate funding, which is another way to ensure that schools and libraries in underserved communities are provided with broadband access. In addition, those incumbent EBS licensees that retain their licenses can continue to meet the educational and other needs of their communities. Finally, the priority window and competitive bidding mechanisms adopted herein will provide additional opportunities for the deployment of broadband service to rural unserved market areas using 2.5 GHz spectrum.

18. The Commission rejects claims that the Commission’s prior decisions to establish ITFS in 1963 and to maintain the eligibility restrictions in 2004 support continuation of the EBS eligibility restriction. When the 2.5 GHz band originally was designated for educational use in 1963, there was a demonstrated need for dedicated spectrum for educational television services. When, in 2004—three years before the introduction of the smartphone—the Commission decided against revising the eligibility restrictions, the 2.5 GHz band was just beginning a major transition, as it moved from an analog television service to a broadband service accompanied by substantial technical changes. In that context, the Commission concluded that it was premature to eliminate the restrictions at that time. In contrast, this band now is used primarily for broadband, and it resembles flexible use bands such as the PCS or AWS bands more than it resembles the ITFS band of old. Indeed, even the current educational use requirements—to retain 5% of capacity for educational use and to use each channel at least 20 hours per week for educational purposes—have little relevance to the way this band is being used. In the exercise of the Commission’s spectrum management responsibilities, the Commission believes that it is more appropriate in these circumstances to address the critical shortage of flexible use mid-band spectrum necessary to promote the deployment of wireless broadband devoted to the wide range of 5G uses.

19. Further, the Commission is not persuaded by the economic study submitted on behalf of SHLB in support of maintaining the eligibility requirements, which it finds to be premised on an unrealistic deployment model. The SHLB Economic Study discusses the services offered by Mobile Citizen and Mobile Beacon pursuant to their agreement with Sprint, as well as those offered by self-deployed EBS networks, and it constructs a framework to measure the economic benefit of retaining eligibility restrictions assuming that educational licensees offer broadband service at \$15/month. However, as noted previously, most educational licensees have chosen not to deploy their own networks. Indeed, none of the self-deployed educational networks identified by SHLB offer service on a regular basis to the general public at \$15/month.<sup>4</sup> While economic and social benefits would flow from increased broadband adoption, SHLB has not shown that educators could sustain a broadband system at the \$15/month price point they studied. Finally, the study in the Commission's view does not adequately address the problem of the digital divide. Specifically, while Mobile Citizen and Mobile Beacon offer access at \$10/month pursuant to their agreement with Sprint, their associated companies hold EBS spectrum licenses in major and more densely populated markets. The Commission cannot infer from this that new EBS licenses in rural areas would be able to negotiate similar agreements with Sprint or another provider, particularly given the higher cost of deploying mid-band spectrum in rural areas.

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<sup>4</sup> SHLB identifies seven "infrastructure-based" EBS networks. SHLB Economic Study at 22 (Table 2-3). Two of the networks (Havasupai Tribal Council and Nisqually Indian Tribe) are tribal networks that are not relevant here. NMU charges \$34.95/month to the general public, \$24.95/month for alumni and veterans, and \$19.95/month for students. See <https://www.nmu.edu/ean/>. Kings County charges \$30/month for fixed access and \$40/month for mobile access, with 50% discounts for students. See <https://www.kingsco.eo.org/domain/45> (Internet Fees, Prepaid Service). Imperial County, California's network is still in the pilot phase and is seeking donations to support its operations. See <https://www.icoe.org/about-icoe/borderlink>. It is unclear that the Louisa County, Virginia network is in fact operating. In its most recent filing concerning its special temporary authority, Louisa County reported that it was working to construct its system. See File No. 0008360114, Extension Request (filed Sep. 7, 2018). Finally, based on press reports, Albemarle County's system is only available to students. See Alison DeNisco, High speed internet and free internet meet (July 25, 2017), <https://districtadministration.com/high-speed-internet-and-free-internet-meet/>.

20. Further, the SHLB Economic Study claims that the economic and social benefits from assigning the 2.5 GHz spectrum via an overlay auction are less than if the licenses were assigned to educational institutions and/or Tribal nations. The Commission disagrees. The Commission finds that auctioning overlay licenses for remaining white spaces will be a more efficient and effective means of addressing the digital divide, as new EBS licensees will have both the market incentives and flexibility to pursue the most efficient deployment of this spectrum. The Commission notes that the Commission for over a quarter-century has successfully assigned spectrum via auction. It has recognized that spectrum auctions allow market forces to determine the highest and best use of scarce spectrum and the highest value user. The SHLB Economic Study not only fails to recognize the efficiency of spectrum auctions, but it also understates the potential benefits of an overlay auction because its commercial deployment model only considers deployment to entire counties, and it precludes deployment to parts of counties, which would greatly expand the potential scope of commercial deployment after an auction. The SHLB Economic Study also fails to consider complementarities that EBS spectrum may have with other spectrum bands. As noted above, the Commission has a comprehensive strategy to make additional high-band, mid-band, and low-band spectrum available, and wireless providers can combine these different bands to better achieve the best 5G coverage and capacity possible. Finally, the SHLB Economic Study is mistaken in concluding that there is no “economic surplus” from an overlay auction because it “would not allow commercial carriers to launch more affordable offerings.” Additional spectrum may lower network costs for service providers (*e.g.*, by eliminating the need for cell-splitting), thus leading to more affordable plans for American consumers.

21. In addition, to the extent that SHLB suggests that the Commission impose some sort of rate regulation on new EBS licensees, it fails to consider the disincentive that such a requirement would create to using these licenses to provide broadband service, especially in conjunction with similar bands used for broadband. That disincentive would be particularly significant given the fact that today’s

networks use a mixture of spectrum bands, and the 2.5 GHz band represents key mid-band spectrum for the deployment of 5G. Indeed, while CTN and NEBSA support the existing eligibility requirements, they do not see the proposal around which the SHLB Economic Study is based as workable. To be clear, nothing the Commission adopts prevents existing EBS licensees from pursuing opportunities with commercial service providers to provide broadband to the public; in fact, the Commission's action allows current EBS licensees flexible use of the full amount of spectrum they hold. Finally, the desire of entities such as Mobile Citizen and Mobile Beacon to expand their broadband service offerings to the general public using 2.5 GHz spectrum underscores the importance of making this spectrum available as quickly as possible.

22. There is no reason why those who hold licenses granted pursuant to waiver of the filing freeze should not have the same rights to transfer or assign or lease their licenses as other incumbent EBS licensees, and thus the Commission will permit those who hold licenses granted pursuant to waiver to freely assign or transfer their licenses. The existence of the filing freeze justified treating these licenses differently at the time they were granted, including subjecting the licenses to significant conditions such as prompt build-out and a prohibition on leasing. Now that these licensees have been operating and providing service in compliance with these conditions, and the filing freeze is being lifted with the upcoming Tribal priority window and competitive bidding opportunity, the Commission sees no reason to continue to apply different rules to them.<sup>5</sup>

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<sup>5</sup> Some commenters assert that the EBS application filing freeze, and not EBS eligibility restrictions, is the main cause of the inefficient use of EBS spectrum. CoSN Comments at 2-4; EBPARG Comments at 9-10; NEBSA/CTN Comments at 3-8. Without question, the EBS filing freeze contributed to underuse of the EBS band in some locations. By the Commission's actions in this item, including eliminating eligibility restrictions and education use requirements, establishing a priority filing window for new licenses for rural Tribal lands, and determining to assign the remaining unassigned frequencies through competitive bidding, the Commission provides a path forward to remedy this longstanding situation. However, the fact remains that with limited exception, most EBS licensees lease their spectrum to commercial operators, and meet their educational requirements providing services that do not require dedicated EBS spectrum.

23. To effectuate the Commission's decision to eliminate the EBS eligibility restriction, the Commission will eliminate existing § 27.1201 of the Commission's rules. In addition, the Commission will amend its secondary market leasing rules to eliminate the EBS-specific exception to the rule that a lessee must be eligible to hold a license in the service in which it is leasing spectrum. Since EBS will now be a service with open eligibility, the exception will no longer be necessary.

## **2. Educational Use Requirements**

24. The Commission finds it is in the public interest to give licensees flexibility to put 2.5 GHz spectrum to its most efficient use, rather than maintaining or updating outmoded educational use requirements that have not been changed since 1998. Licensees holding licenses in the 2.5 GHz band, whether obtained before or after the adoption of this *Report and Order*, will not be required to use these licenses to fulfill an educational mission, although they are still permitted to do so.

25. This decision is consistent with the Commission's other decisions in this item to increase flexibility and eliminate outdated EBS requirements. The primary purpose of the educational use requirements was to ensure that educational licensees were using the spectrum for educational purposes, in order to "safeguard[] the primary educational purpose of the ITFS spectrum allocation." If the Commission allows non-educators to hold licenses directly, it makes little sense to retain these restrictions on spectrum use. Furthermore, the Commission believes that eliminating these requirements is the best means of promoting flexibility, which ultimately will promote the deployment of broadband and allow markets to direct spectrum to its most productive use, for the benefit of educational institutions and all Americans.

26. As the Commission stated in the *NPRM*, the educational use requirements have not been updated since 1998 and were based on the use of analog video. Circumstances have changed radically since the Commission established ITFS. In 1963, there were very limited means of distributing educational programming to students, and a dedicated means of distributing such programming made

sense. Now, as WCAI notes, “broadband gives all educators—not just those lucky enough to be EBS licensees—the ability to provide access to educational materials to whomever they choose.” The Internet is a far more prevalent and efficient mechanism for distributing content. T-Mobile compares the efficiency of Internet video streaming (for live events) or the downloading of compressed video files (for recorded material) over generic broadband digital connections versus using dedicated video transmissions. Furthermore, educators also use broadband to communicate with peers, collaborate across platforms, and research. Moreover, most current EBS licensees have abandoned use of EBS as a closed, dedicated means of distributing educational content. The educational use of the 2.5 GHz band has become indistinguishable from the commercial broadband service offered by the commercial lessee, with most EBS licensees or their commercial lessees providing digital broadband service, offered 24/7, at the school itself, at home, or anywhere within the licensee’s GSA. Even if there were a rationale for maintaining the educational use requirements in the absence of eligibility restrictions, the Commission sees no workable set of requirements in this record. Commenters recommend that the Commission adopt a large and diverse set of potential requirements, ranging from new metrics differentiated by institution size to certification requirements to price mandates.

27. But the alternative educational use requirements proposed by commenters would neither facilitate broadband deployment nor be workable for licensees or commercial operators. Requiring a commercial operator to designate a fixed percentage of capacity for educational use is not an appropriate requirement when it is not clear how much capacity future networks will have or how much capacity most educational institutions will need or be able to use. Similarly, imposing rate regulation on new EBS licensees offering broadband service to consumers likely would create a disincentive to providing broadband service and would establish a regulatory requirement that would make it more difficult to use the band in conjunction with similar bands used for broadband. There is a large difference between the voluntary partnership entities such as Mobile Citizen and Mobile Beacon

have negotiated to facilitate discounted broadband access and a regulatory mandate that would be a form of price control. The Commission also agrees with NEBSA/CTN that it is difficult to see how such a requirement would be defined and enforced.

28. The Commission is sensitive to the concerns raised by Sprint and NEBSA/CTN that any changes it makes not disrupt any existing leases. The Commission clarifies that nothing in its decision to remove the educational use requirement is intended to affect or change the terms of any private contractual arrangement or any provisions in existing leases that may provide a licensee with airtime, equipment, or capacity. In other words, if a lease negotiated under the old rules provides that a licensee shall receive services or equipment from a lessee, the Commission's decision does not change or nullify the provisions of that lease.

29. Finally, the Commission disagrees with NACEPF that the educational use requirements are one of the few tools the Commission has that can address the homework gap. There are many other spectrum bands that educators may use if they do not have access to 2.5 GHz spectrum, such as 5 GHz Wi-Fi or General Authorized Access in the 3.5 GHz CBRS band, and as mentioned above, commercial services developed using licensed spectrum are broadly deployed (certainly more so than services relying on current EBS spectrum). In addition, the Commission has for years focused on providing connectivity to millions of students and library patrons through its E-Rate program.

### **3. Eliminating Leasing Restrictions**

30. Given the Commission's decision to eliminate eligibility requirements, and the fact that broadband is the predominant use of the EBS band, the Commission sees no value in maintaining special lease restrictions that only apply to EBS. Eliminating the leasing restrictions that only apply to EBS licenses will make the rules for the 2.5 GHz band consistent with other Wireless Radio Services, incentivize build-out in rural areas and provide additional flexibility to both EBS licensees and lessees to enter into mutually beneficial arrangements.



31. The Commission agrees with commenters that argue that these lease restrictions are unique to EBS and that they constrain commercial operations and deter investment, particularly in rural areas. The Commission concurs with VIYA that, if eligibility restrictions are eliminated, the restrictions on lease terms serve no purpose.

32. The Commission acknowledges that many educational institutions oppose eliminating restrictions on lease terms, with a split between educational institutions that support the current leasing rules and those that want to impose additional restrictions on leasing. Supporters of the current leasing rules argue that the lease term limitations allow educational institutions to review their leases periodically in light of changing needs and technology. In contrast, Educational Broadband Corp. (EBC) urges the Commission to eliminate lease terms that transfer too much control to the lessee, while Havasupai and Utah would prohibit leasing to commercial providers so that use of the spectrum can be focused on education. The Commission agrees with those commenters arguing that its actions should not harm or invalidate existing leases, and the Commission emphasizes that nothing in this *Report and Order* is intended to invalidate existing lease provisions. Leases are a form of contract, and the parties retain the ability to exercise their rights under state contract law. Indeed, there is broad agreement among both educational institutions and commercial providers that the Commission should not take any action to invalidate or harm existing leases. As HITN writes, “[b]oth commercial lessees and educational lessors, have invested in services and equipment, in substantial reliance on the negotiated terms of their existing leases, and the Commission should make no rule changes that would interfere with or substantially alter such contractual rights and obligations.” WCAI and Sprint take a similar view. To the extent some argue for additional restrictions on leasing, the Commission finds that such additional restrictions would be inconsistent with its goals of promoting broadband deployment using EBS spectrum and maximizing flexibility for EBS licensees.

33. The Commission therefore eliminates § 27.1214 of the Commission’s rules, except for paragraph (d). In addition, the Commission will eliminate § 1.9047, which is a cross-reference in the secondary market rules to § 27.1214.

#### **4. Modifying Existing License Areas**

34. To ensure that the fallow spectrum in this band is made available for use quickly, the Commission has decided to leave existing license boundaries for incumbent 2.5 GHz licenses intact, rather than imposing a complex and protracted rationalization process on incumbents. In the *NPRM*, the Commission proposed to rationalize the current point-and-radius license areas held by incumbents to a defined geographic area and sought comment on a number of issues related to this proposal. Upon review of the record, however, and in light of the unique circumstances posed by licensing of this 2.5 GHz band as discussed below, the Commission finds that engaging in the complex, and potentially confusing process of rationalizing current licenses to a geographic area (such as counties or census tracts) would delay making the white spaces available in this band and would not likely result in the potential benefits explored in the *NPRM*.

35. With regard to the *NPRM*’s proposal to modify each existing license to include all of the census tracts covered by each current geographic service area the Commission is persuaded by opponents’ argument that census tract-based rationalization would not necessarily result in more easily-determined license boundaries and therefore would not facilitate service by either existing licensees or new entrants. As the EBC and other commenters point out, any method of assigning census tracts to incumbents is likely to leave license areas with edges like “saw teeth”—irregular zig-zagging lines with frequent, small protrusions. Given the propagation characteristics of the 2.5 GHz band, it would be difficult to provide services to these areas as a technical matter, and this difficulty may result in significant degradation of service near market boundaries, as each licensee decreased power in order to remain within power limits, resulting in lower signal strength and lower service quality in the area. This

issue does not arise to the same degree with the current license areas, as their smooth, circular contours are more consistent with signal propagation patterns. In addition, any problems caused by these irregular boundaries necessarily also would affect the white space available for licensing subject to competitive bidding, at the borders between incumbents and new entrants. Because the potential for operational problems far outweighs the small potential for improvement in the regularity of the resulting white space, the Commission therefore declines to adopt a census tract-based rationalization scheme.

36. The Commission also rejects the proposal by commenters to expand existing GSAs to include the counties covered by or that intersect the geographic service area, based on a coverage threshold determined by the percentage of the geographic area of the county covered by the licensee. While the Commission has recognized the benefits of adopting county-based licensing in other bands, the Commission declines to adopt a county boundary-based rationalization scheme for incumbents in the 2.5 GHz band for several reasons. First, the Commission is concerned about the potential for some licensees to receive a much larger GSA, with no corresponding requirement to provide service in the expanded area. For example, San Bernardino County, the largest county in the United States, covers over 20,000 square miles, compared to the maximum incumbent license area of approximately 3,850 square miles. Since the Commission is not applying updated performance requirements to existing EBS licenses, there is no guarantee that existing licensees would use the expanded area. Alternatively, was the Commission to adopt NACEPF's suggestion to expand incumbents' licenses to county boundaries subject to additional build-out requirements, incumbents with no interest in serving additional geographic areas, especially in very large counties, could ultimately lose their entire license based on a failure to expand service.

37. Second, implementing county-based expansion in situations with multiple incumbent licenses in the same county raises complex issues that likely reduce significantly the benefits of county

expansion. To handle such situations, several commenters suggest “splitting the football,” the methodology that the Commission previously employed in this band to address the issue of overlapping circular GSAs or alternative methods to deal with multiple incumbents expanding into the same county. While “splitting the football,” or using a similar method to establish a border between multiple incumbents expanding into the same county, might be equitable for current licensees, it would not result in regular, mappable license areas based on geographic boundaries. The resulting borders would not correspond to any official boundaries or natural features; instead, they could only be calculated by referencing the previous license areas—either the “point” of the point-and-radius GSA, or the edge of the previously-calculated circle—neither of which would be immediately visible after rationalization. All of the problems cited by commenters, including the difficulty of administering these arbitrary license areas in ULS, would persist. CA K-12 HSN’s suggestion of splitting counties by spectrum is also problematic. Wider channel width is important for many advanced wireless applications, including 5G, and dividing spectrum among multiple incumbents may reduce its usefulness significantly.

38. Third, using a percentage threshold based on existing geographic area coverage of a county relative to the total area of the county limits the amount of rationalization that actually takes place. Commenters originally proposed a wide array of threshold levels of geographic coverage within a county that an incumbent licensee would be required to meet to qualify for expansion to the county’s boundaries, including 10%, 20%, 30%, 35%, or 80% of the geographic area of the license. Sprint, WISPA, MidCo, WCAI, CTN, NEBSA, Voqal, and NACEPF subsequently agreed on using a 25% threshold. To the extent the Commission adopted any threshold for county-based expansion, however, many incumbent licenses would remain at least partially “un-rationalized,” because if the GSA is in more than one county (as many are), some sections of the license would expand to county borders and some sections of the license would not expand to county borders, but rather would remain bounded by the circle arc. Counties with un-rationalized license sections still would be subject to all the problems and continuing

coverage gaps cited in the record. In addition, as WCAI notes, expanding licenses to county boundaries in some cases, while leaving vestigial circle arcs in other counties, *with respect to the same GSA license*, would result in “significant confusion as to what areas are white space,” as well as “exacerbat[ing] the [current] problem by adding a second, geographic area-based approach.”

39. Although some commenters point to certain alleged advantages of county-based rationalization, including eliminating coverage gaps between current license areas better aligning licenses with typical school districts, and other claimed advantages, the Commission concludes that the problems associated with county-based rationalization outlined above outweigh any of these potential benefits. NACEPF also mentions faster 5G deployment in the 2.5 GHz band as a benefit of county expansion, primarily due to the resulting increase in the license areas available to Sprint. While Sprint supports county-based rationalization, it does not make any commitments to deploy in expanded license areas.

40. The Commission also rejects other alternative rationalization schemes suggested by commenters, such as self-defined GSAs, GSAs based on granular population data, or GSAs that vary from state to state based on local school district size. Those methods of rationalizing licenses would be both unpredictable and difficult to implement. The Commission also rejects rationalization of existing EBS licenses to “correspond with the geographic areas where existing licensees currently provide service,” because such an approach: (1) would take years to implement, as it would require an extensive analysis of where service was being provided, (2) would be prone to litigation, and (3) would be inconsistent with the goal of quickly getting unused spectrum into the hands of those who will provide service, including 5G, to Americans across the country.

41. Similarly, any of the rationalization schemes described in the *NPRM* or suggested by commenters would require considerable time to implement and would have to be completed before any auction of remaining spectrum could take place. In addition to the necessary changes to the

licensing system, the process of resolving whether the required threshold had been met and dealing with situations where multiple incumbents met the threshold would be complex. Adding a complicated and lengthy rationalization process before the auction could delay the deployment of 2.5 GHz services in currently unlicensed areas. In the interest of expeditiously moving this important mid-band spectrum into the hands of those best able to develop it, the Commission concludes that the likelihood of considerable delay for such a limited result is not in the public interest.

42. Given the complications and drawbacks inherent in all the rationalization schemes proposed in the record with respect to licensing of this band, the Commission declines to adopt any of the proposals. Instead, the Commission concludes that the best mechanism of putting unassigned spectrum to use as quickly and efficiently as possible is to offer overlay licenses subject to competitive bidding. Such an overlay license approach also addresses any concerns regarding irregular gaps between license areas, allowing overlay licensees to take existing EBS license contours into account when bidding for such license.

**B. Local Priority Filing Windows**

43. In the *NPRM*, the Commission proposed to use geographic area licensing to assign the remaining unassigned portions of the 2.5 GHz band. Envisioning that these geographic licenses would be assigned by auction, the Commission also sought comment on whether it first should open up to three priority filing windows to give Tribal Nations, other non-licensee educational institutions, and existing licensees an opportunity to file applications for 2.5 GHz licenses to serve their local communities, in advance of any auction for these frequencies. The Commission explained that, in each filing window, qualifying applicants would have the opportunity to apply for one or more vacant channels of EBS spectrum in areas where the applicant can demonstrate that it has a local presence.

44. In this *Report and Order*, the Commission adopts a priority window for Tribal Nations to obtain access to the 2.5 GHz band on rural Tribal lands. The priority window will operate as an overlay

license, with Tribal priority window applicants obtaining geographic area licenses subject to protecting incumbent operations within the relevant geographic area. The Commission declines to adopt priority windows for non-incumbent educational institutions or incumbent licensees.

#### **1. Tribal Priority Window**

45. The Commission finds that adoption of a Tribal priority window for Tribal entities to obtain EBS licenses on Tribal lands that are located in rural areas is in the public interest. Consistent with the Commission's suggestion in the *NPRM*, the Commission concludes that opening a priority filing window for rural Tribal Nations will provide Tribal Nations with an opportunity to obtain unassigned EBS spectrum to address the communications needs of their communities and of residents on rural Tribal lands, including the deployment of advanced wireless services to unserved or underserved areas. The Commission has recognized that "members of federally-recognized American Indian Tribes and Alaska Native Villages and other residents of Tribal lands have lacked meaningful access to wired and wireless communications services." The EBS spectrum offers sufficient bandwidth to give rural Tribal entities an opportunity to provide broadband wireless service. As proposed in the *NPRM*, applicants in the Tribal priority window will be able to acquire all available EBS spectrum on their rural Tribal lands.

46. The Commission's decision to adopt a Tribal priority window finds broad support in the record, including from many Tribal and Tribal-related commenters, who argue that opening a priority filing window for Tribal Nations would provide rural Tribal Nations with a way to obtain spectrum that could be used to provide needed advanced wireless and broadband services. In addition, those commenters who support local priority filing windows in general also support a Tribal priority window. Even among commenters who oppose local priority windows in general WCAI acknowledges a need for a Tribal priority window. The Commission disagrees with MidCo's assertion that priority windows would "not further any national policy objectives" because, as explained above, a Tribal priority window would facilitate access to high-speed broadband, including 5G, on rural Tribal lands.

47. *Eligibility.* As proposed in the *NPRM*, eligibility for the Tribal priority window will be limited to federally-recognized American Indian Tribes and Alaska Native Villages on rural Tribal lands. As of September 24, 2018, there were 573 federally-recognized Indian tribes. Federally-recognized Tribes have a government-to-government relationship with the United States and are eligible to receive certain protections, services, and benefits by virtue of their federally-recognized status. While the Commission's rules with respect to Tribal eligibility in various contexts vary somewhat, they universally limit eligibility to those Tribes that are "federally-recognized," so the Commission will do so with respect to the Tribal priority window.

48. The Commission will extend eligibility in the Tribal priority window to communications providers and other entities that provide communications and other services, provided that that they are owned and controlled by federally-recognized Tribes or a consortium of such Tribes. To permit these entities to be eligible to hold EBS licenses and use those licenses to provide broadband service on rural Tribal lands, the Commission will permit those entities and others that are owned and controlled by a federally-recognized Tribe or a consortium of federally-recognized Tribes to participate in the Tribal filing window and to hold EBS licensees.<sup>6</sup> AIHEC requests that the 38 Tribal Colleges and Universities (TCUs) be classified as eligible to apply for available EBS spectrum. To the extent TCUs or other educational entities are owned and controlled by a federally-recognized Tribe or a consortium of federally-recognized Tribes as well as the other requirements the Commission establishes for participation, they would also qualify as applicants in the Tribal priority window.

49. *Tribal Lands.* For purposes of the Tribal filing window, the Commission adopts the broad definition of Tribal lands contained in the Commission's part 54 rules. The Commission does so because,

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<sup>6</sup> Specifically, the provider must be more than 50% owned by one or more federally recognized Tribal Nations or Tribal consortia and actually controlled by one or more federally recognized Tribal Nations or Tribal consortia.



in both the Universal Service and EBS contexts, the Commission is assisting Tribes in obtaining necessary communications services. The Commission declines to adopt the part 73 definitions proposed by some commenters because broadcast definitions were adopted to permit comparison between non-commercial educators applying for broadcast stations, while the part 54 definition has a similar purpose to the Tribal priority window, to encourage provision of broadband service on rural lands.

50. The Commission will include in the Tribal priority window Tribal lands on-reservation in all situations and off-reservation lands in certain situations. Consistent with the Commission's ongoing effort to close the digital divide on rural Tribal lands, the purpose of this filing window is to provide broadband access to Tribal lands that historically have been unserved or underserved. It is important to ensure that entities acquiring spectrum in this window will use it to meet the needs of Tribal members.

51. In the *NPRM*, the Commission requested comment on the appropriate geographic area for such licenses and whether county-based or census tract-based license areas might be appropriate. While some commenters support county-based or census tract-based licensing for Tribal entities, most Tribal entities favor a geographic license area that tracks reservation boundaries. In addition, some Tribal entities have members who don't reside on a reservation but live beyond the boundaries of Tribal lands on off-reservation lands. In addition, some federally-recognized tribes do not have reservations at all. These commenters ask that the Commission includes in this priority window licenses that cover "counties bordering the licensees' reservations" or counties in which Tribal lands cover some minimum percentage of a county (such as 10%).

52. The Commission agrees with commenters that including off-reservation lands in the Tribal priority window can help promote its goal of facilitating access to wireless service to underserved Tribal populations, and that the Commission must define eligible off-reservation lands in a way that promotes this goal. With respect to including off-reservation land in the Tribal priority window, the Havasupai propose that Tribal entities be licensed on an "ad hoc" basis using a variety of criteria such as:

the services to be provided, the location of the target recipients, the amount of EBS spectrum that will be used to provide the service, the broadcast or distribution capabilities of the applicant, and the percentage of the target population that will be served by the proposed size of the service area. The Chickasaw Nation suggest that the service area should be based on whether a “portion of the Tribe’s population will be served by licensing that proposed” service area. Instead of relying on the “ad-hoc” processes proposed by Tribes, the Commission will rely on an existing Commission process and designate off-reservation Tribal lands as eligible for the Tribal priority window if they have already been designated (as of the adoption date of this *Report and Order*) as Tribal lands pursuant to the designation process contained in § 54.412 of the universal service rules. The Commission finds that using the existing process would be efficient and facilitate prompt processing of Tribal priority applications. The Commission finds that limiting eligible off-reservation lands as of the adoption date of this *Report and Order* will provide certainty to Tribal applicants and facilitate administration of the Tribal priority window.

53. While Midco may be correct that, in some cases, “irregularly shaped” reservation-based Tribal lands will complicate the geographic landscape for EBS licenses awarded through competitive bidding, the Commission does not see this potential complication as a reason not to make all reservation lands available for the Tribal priority window. EBS licensees that acquire their licenses through competitive bidding will have to protect existing EBS licensees, many of which already have irregularly shaped geographic service areas. More importantly, the Commission finds that the need to provide Tribal lands with broadband service outweighs this additional complexity.

54. *Rural.* To be included in the Tribal priority window, the Commission adopts the proposal from the *NPRM* that, in addition to being designated as Tribal Lands, an area must also be rural. The Commission understands that not all Tribes are located in areas that are considered rural and that by limiting eligibility to rural Tribal lands, some tribes may be excluded from the window. However, as the

Commission has previously made clear, bringing broadband access to rural Americans is critical to providing them with the same economic, employment, education and civic opportunities that people in urban areas enjoy. Because the problem of access to wireless communications services is most acute in rural areas, and because the purpose of the Tribal priority window should be to promote service to areas that are currently unserved or underserved, the Commission believes that limiting this priority window to rural Tribal lands will provide the most effective and targeted way to achieve the Commission's goal of closing the digital divide in Tribal lands.

55. First, the Commission is not persuaded by the objections raised to limiting the Tribal priority window to rural areas. For example, the Commission disagrees with the assertion that such a limitation is inconsistent with the "federal government's trust relationship with Indian tribes," as that relationship is not limited to rural areas. The Commission is committed to honoring its trust relationship with Tribal Nations through, among other things, policies facilitating broadband deployment on Tribal lands. Individual policies tailored to specific deployment issues, such as increasing access to spectrum over unserved rural areas, positively contribute to this overall effort. Nor is the Commission persuaded that limiting access to rural areas will reduce flexibility for Tribal Nations to use this spectrum, create definitional uncertainty for Tribal Nations, or create separate classes of Tribal governments, which is inconsistent with the intent of Congress. Priority window applicants seeking access to 2.5 GHz spectrum on rural Tribal lands will not be limited in how they use the spectrum; rather they will have the same flexibility as other licensees. Since the Commission is adopting an objective definition of what land will be considered rural, Tribes will be able to determine whether the lands for which they seek licenses are eligible for this window and make the appropriate demonstration.

56. The Commission is, however, persuaded that, in establishing what constitutes rural Tribal lands for purposes of a Tribal priority window, the Commission should set a population limit that is higher than the one the Commission proposed in the *NPRM*. Although in the *NPRM*, the Commission

proposed using the definition of rural Tribal lands from the E-rate and Lifeline programs: *i.e.*, Tribal Lands that are not part of “an urbanized area or urban cluster area with a population equal to or greater than 25,000,” the Commission notes that, as the Chickasaw Nation asserts, some clusters within historically rural Tribal lands have populations very close to or perhaps just over 25,000. The Commission therefore adopts the proposed definition but modify the population threshold for an urbanized area or urban cluster from 25,000 to 50,000. Therefore, Tribal lands will be considered rural if they are not part of an urbanized area or urban cluster area with a population equal to or greater than 50,000. In this specific instance, the Commission finds that using the population threshold of 50,000 will provide certainty to Tribes in *bona fide* rural areas that they can take advantage of the Tribal priority window while ensuring that the Tribal priority window is appropriately targeted and limited. Some commenters suggest other definitions of rural for the Tribal priority window. The Commission finds that by focusing on areas that are not part of urbanized clusters, as the Commission does in the E-rate and Lifeline programs, the Commission will best target those areas that are most difficult to serve and are therefore likely in greatest need of high-speed broadband service. The Commission finds that using this population limit is consistent with its goal of targeting underserved and unserved Tribal areas.

57. *Local Presence.* The Commission adopts the *NPRM*’s proposal to require that all applicants for the Tribal priority window have a local presence in any area for which they apply. The Commission believes Tribal entities with a local presence better understand the needs of their communities and are better able to serve those needs. Further, there is no opposition to this proposal with respect to Tribal entities, and thus, the Commission will require applicants for the Tribal priority window to demonstrate that they have a local presence in the Tribal land area for which they seek licenses.

58. *Timing.* To ensure that federally-recognized Tribes have access to the maximum amount of unassigned EBS spectrum available on rural Tribal lands, the Commission will open the Tribal

priority window before the Commission makes unassigned EBS spectrum generally available to all entities through competitive bidding.

59. *Procedures.* While few commenters address the application process for the Tribal window, several Tribal entities propose a 90-day notice period prior to the opening of the priority filing window with a 60-day window for the filing of applications. In accordance with the process the Commission uses for competitive bidding and with its notice and comment requirements, the Commission directs the Wireless Telecommunications Bureau to announce procedures for the Tribal priority window through one or more Public Notices and other appropriate outreach to potentially eligible Tribal applicants.

60. The Commission rejects Colville’s suggestion that the Commission rank applicants eligible for the Tribal window based on a “tribe’s reservation size and location, with the largest, most sparsely populated, and currently least ‘wired’ reservations receiving top priority.” The Commission does not believe it necessary to rank Tribal eligibility. The Commission finds it unlikely that applications filed in the Tribal priority window will be mutually exclusive in light of its criteria requiring that: (1) Tribal applicants be federally-recognized; (2) the area to be licensed be based on a Tribe’s reservation or qualified off-reservation lands; (3) the area be rural; and (4) the Tribe have a local presence. To the extent that the Commission does receive mutually exclusive applications, the Commission required by statute to subject such applications to competitive bidding.

61. *Other Issues.* Because the Commission is eliminating the educational use requirements for EBS spectrum generally, the Commission finds that it would make little sense to apply those requirements to new Tribal licensees. To that end, the Commission will not impose educational use requirements on the EBS spectrum available in the Tribal filing window.

62. Consistent with the Commission’s general decision to eliminate leasing restrictions generally for EBS licenses, the Commission will not impose such restrictions on Tribal licensees’ ability to

lease spectrum to third parties. According to certain Tribal commenters, doing otherwise might “impede the Commission’s goal of timely and efficient build out in rural areas.” Tribal entities may not have the “know-how or resources to build out a broadband network” and leasing will increase the likelihood that the spectrum is “used for its highest and best use.” In addition, the Tribes should be able to lease unused spectrum to “bring in much needed revenue.” Although the Commission is generally eliminating restrictions on assignment and transfer of existing EBS licenses, the Commission believes it necessary to impose some restrictions on assignment and transfers of licenses acquired in the Tribal priority window. Because proponents of the Tribal priority window have indicated an urgent need for the spectrum to provide service to underserved tribal communities, the Commission believes it is appropriate to limit, and will accordingly restrict, Tribal licensees’ ability to assign or transfer their licenses until after they have met the build-out requirements applicable to these licenses.

63. The Tribal window will include only unassigned EBS spectrum. The Commission rejects suggestions from several Tribal commenters that the Commission permits Tribal entities to apply for already-licensed spectrum.<sup>7</sup> Not only would such an action be beyond the scope of the *NPRM*, but it also would have a substantial effect on existing licenses that are in compliance with the Commission’s rules. However, since licenses granted to Tribal entities will be overlay licenses, if an incumbent license that covers rural Tribal lands is cancelled or terminated, any spectrum that becomes available over time will revert to the Tribal licensee. Similarly, Tribal licensees are authorized to lease, partition, or

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<sup>7</sup> Several Tribal commenters suggest that the Commission should revoke licenses or mandate disaggregation of spectrum from incumbent EBS licensees with spectrum covering Tribal lands, or that the Commission otherwise should force them to provide service to the Tribal lands or give their spectrum to the Tribal entity. Bad River asks the Commission for a clarification that EBS licenses can be disaggregated. Bad River Comments at 7, n.12. As § 27.15 permits disaggregation for EBS licenses, such clarification is not necessary. However, nothing in that rule mandates such disaggregation. Bad River Comments at 6-7; Chickasaw Nation Reply at 3; Mural Net Comments at 4; Nez Perce Comments at 3, 5; Pueblo de Cochiti Reply at 2; Santa Fe Indian School Reply at 2. Colville asks that the Commission reassign incumbent EBS licenses that are not being used by the incumbent licensee and make them available for application during the filing window. Colville Comments at 5.

disaggregate their spectrum, including in areas in or near rural Tribal lands. The Commission does not require that incumbent licensees do so, but the Commission encourages those who have holdings covering, or adjacent to, rural Tribal lands to work cooperatively with new Tribal licensees to facilitate deployment of needed service to these areas.

## **2. Educational Institution Priority Windows**

64. The Commission declines to establish a priority filing window for educational institutions, either for educational institutions that do not currently hold EBS licenses or for existing licensees. Adopting a priority window restricted to educational institutions would be at odds with the Commission's other decisions to provide greater flexibility for more providers to make use of the 2.5 GHz band to offer high-speed broadband service to the public. Given the Commission's experience with service deployment to date in EBS, with the vast majority of licensees leasing their spectrum to commercial providers, the Commission believes that making the unassigned EBS spectrum available for flexible use is the best way of getting broadband service deployed to the public more quickly and extensively. While the Commission understands the desire of certain educational institutions to gain additional access to spectrum, the Commission's decision is guided by the goal of facilitating broadband deployment and spectrum use and perpetuating an outdated regulatory regime in this band will not further this goal.

65. If the Commission adopted a priority window open to all educational institutions, it is highly likely that the Commission will receive mutually exclusive applications. Commenters have identified circumstances that raise substantial doubts about the legal authority of certain EBS licensees, particularly public-school districts and local governments, to participate in a spectrum auction. Specifically, commenters claim that a number of states (approximately 36) have adopted Dillon's Rule, which provides that a municipality may exercise only those powers expressly conferred by statute, necessarily or fairly implied by the expressed power in the statute, or essential and not merely

convenient. Applied to the auction situation, Dillon's Rule may limit the ability of many municipal educational entities, including counties and school districts that hold EBS licenses, from participating in an auction. The Commission notes that no commenter has attempted to show that Dillon's Rule is not an impediment to auction participation.

66. Those problems become important because, under section 309(j) of the Communications Act of 1934, as amended, if mutually exclusive EBS applications are accepted for filing, the Commission must use competitive bidding to resolve the mutual exclusivity. Educational institutions propose various workarounds to address that issue, including using a first-come, first-served filing system, placing strict limits on the number of channels an applicant can apply for, forcing applicants to form consortia, or basing license grants on the number of enrolled students in a service area. These proposals are inconsistent either with the Communications Act's requirement that the Commission use competitive bidding to resolve mutually exclusive applications or with the public interest test applicable to alternatives that avoid mutual exclusivity. Placing strict limits on the number of channels for which an educational institution could apply could constrain severely the capacity any individual educational institution could provide. Finally, choosing between mutually exclusive applicants on a basis other than competitive bidding or requiring applicants that have applied individually to form a joint venture or consortium is plainly inconsistent with the requirement to use competitive bidding.<sup>8</sup>

67. Although EBPARG argues that the use of priority filing windows would quickly put EBS spectrum in the hands of schools and local operator partners that are eager and ready to build out, the Commission does not see a way to avoid the receipt of mutually exclusive applications. And even

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<sup>8</sup> The Commission notes that API has requested that the Commission provide a filing window for critical infrastructure and allow preemptory use of the 2.5 GHz spectrum in certain emergency situations related to oil and gas disasters. API Comments at 3-4. As the Commission determines herein, open eligibility is the best option for assigning unassigned EBS spectrum. API has not demonstrated a critical need for this spectrum and API's members are free to participate in the auction of overlay licenses that the Commission will conduct. See section 0, *infra*.



though SETDA touts the ability of certain educational institutions to provide broadband to unserved and underserved areas, these limited identified examples, among the thousands of EBS licensees, do not persuade us to establish a priority window for all educational institutions. Given the time and effort and delay that would be involved in establishing and running the priority window, and the likelihood that such a window for all educational institutions would result in having to auction the spectrum anyway, the Commission finds that moving directly to flexible use and open eligibility would be the most expeditious method of making spectrum available to provide broadband service in rural and underserved areas, consistent with the Commission's statutory objective to ensure "the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas, without administrative or judicial delays. . . ." The Commission finds that the advantages to the public of making critical mid-band spectrum available for flexible commercial use on a prompt basis far outweigh the detriment to those educational institutions.

68. The Commission recognizes that some institutions have a desire to provide broadband service to rural, underserved areas. In establishing a priority window for Tribal entities—sovereign nations seeking to bring broadband service to the members of their Tribal Nations, but which historically have not had access to such spectrum—but declining to establish a new priority window for educational institutions, the Commission exercising its considered judgment about which proposals will most effectively and expeditiously achieve its statutory obligations and objectives. The Commission believes the Tribal priority window will be a more focused solution than an educational window, since Tribal entities will have a clear incentive to target areas lacking broadband, and Tribes must already work with providers that want to deploy broadband on rural Tribal lands.

69. The Commission has noted that Tribal lands, in comparison to comparable non-Tribal lands (including in rural areas), frequently have characteristics that increase the cost of entry and reduce the profitability of providing service, including cultural and language barriers, a lack of existing

infrastructure, and a predominance of low-income residential customers rather than business subscribers. A recent report to Congress on broadband coverage on Tribal lands recognized that there is a considerable gap between Tribal lands and non-Tribal areas in terms of population covered by mobile LTE service. Further, the report noted that people residing on Tribal lands currently have access to fewer providers that offer 4G LTE coverage. In contrast, the fact that a small fraction of educational institutions might be positioned to provide broadband service in rural areas is not a sufficient basis for establishing a general priority window for all eligible educational institutions.

70. Thus, in the context of the federally-recognized Tribes' unique status, their relationship of trust with the Commission, and their right to set their own communications policies, as well as the unique and significant obstacles to offering service in Tribal areas and the fact that they have not previously had access to this spectrum, the Commission concludes that they have an interest in obtaining additional 2.5 GHz spectrum that is greater than and distinguishable from the interests of educational entities. Beyond Tribal areas, the Commission believes that auctioning overlay licenses for remaining white spaces will be a more effective means of addressing the digital divide. Specifically, new EBS licensees will have market incentives to provide service and will also be required to meet new performance requirements.

71. The Commission also notes most rural Tribal lands areas will likely be associated with a single Tribal entity, whereas many localities have a wide variety of educational institutions that could have a local presence. Accordingly, a Tribal priority window is less likely to trigger mutual exclusivity in a significant number of license areas than a priority window for educational institutions (or a priority window that includes Tribal entities and educational institutions).

72. The Commission also does not adopt a priority window for existing licensees. The Commission declines to open a priority window for existing licensees to expand to county boundaries for many of the same reasons that the Commission declines to expand those licensees' footprints to census

tract or county boundaries; the Commission expects that such a window would be needlessly complicated and delay the deployment of critical mid-band spectrum. Existing licensees have already had the opportunity to avail themselves of the benefits of EBS spectrum. For this reason, the Commission rejects the recommendations of Bridge the Divide and EBC to open a window for incumbent EBS licensees.

**C. Licensing Areas Containing EBS White Spaces**

**1. Auction of EBS White Space Licenses**

73. As proposed in the *NPRM*, any remaining unassigned EBS spectrum will be made available for commercial use via competitive bidding immediately following the completion of the Tribal priority filing window. Section 309(j) generally requires the Commission to employ competitive bidding to award licenses when mutually exclusive applications have been accepted for filing. With the elimination of the eligibility and educational use requirements, the potential for mutually exclusive applications for unassigned EBS spectrum should increase dramatically. While commenters have suggested various ways to avoid mutual exclusivity, in this case, the Commission finds that accepting mutually exclusive applications and using competitive bidding to resolve the mutual exclusivity is the best way to assign spectrum quickly and efficiently for its highest-valued use. Commercial operators strongly support competitive bidding for unassigned EBS spectrum.

74. The Commission is not persuaded by the educational community's concerns about the use of competitive bidding for unassigned EBS spectrum. First, the Commission rejects claims that assigning licenses by auction will lead to the abandonment of educational services and a worsening of the digital divide. To the contrary, the Commission believes this approach is far more likely to deliver value to educational institutions and to help close the digital divide than the status quo, in which EBS spectrum either has lain fallow or has generally not been used for the purpose of providing educational services. The Commission finds that assigning licenses by auction will not displace or impair existing

incumbent licenses or leases, nor will the assignment of overlay licenses impair existing services, since new 2.5 GHz licensees will be required to protect existing incumbent operators from harmful interference. Nothing in this *Report and Order* requires incumbent licensees to abandon their current educational use or to change how they use their spectrum. Finally, the Commission finds that entities that acquire their licenses by auction will have an incentive to provide services to address the digital divide because all new EBS licensees will have to meet the performance requirements that the Commission establishes in this *Report and Order* in markets that they acquire. Licensees, whether incumbent or new, can provide any services the market requires, without limitation.

75. *Auction of Overlay Licenses.* To make the unlicensed EBS spectrum as attractive as possible to potential entrants, while protecting the rights of incumbent EBS licensees and their lessees, the Commission concludes that offering geographic overlay licenses that are subject to competitive bidding in those markets where white spaces (*i.e.*, spectrum that is not associated with an active license) exist is the best mechanism for assigning this spectrum. With overlay licenses, the licensees obtain the rights to geographic area licenses “overlaid” on top of the existing incumbent licenses. As with an ordinary flexible use license, the overlay licensee may operate anywhere within its geographic area, subject to protecting the licensed areas (*i.e.*, GSAs) of incumbent licensees. If an incumbent licensee in a county cancels or terminates its license, the overlay licensee obtains the rights to operate in the geographic area and on the channel of the cancelled license. An overlay licensee may clear its geographic area by purchasing the incumbent licenses, but it does not have the exclusive right to negotiate with the incumbent licensee for its spectrum rights or to purchase an incumbent license in the geographic area in which it has the overlay rights. An auction of overlay licenses would make the unassigned EBS spectrum available expeditiously to potential bidders and would provide a mechanism for those bidders to acquire additional spectrum usage rights within their geographic area when and if an incumbent licensee desires to make its spectrum available. For these reasons, the Commission

believes that assigning overlay licenses for vacant and available EBS spectrum by competitive bidding is the best method for assigning such spectrum, because it will maximize the potential for expansion, without disrupting existing licensees and lessees.

76. It does not make sense to limit the auction to licenses covering only unlicensed EBS spectrum. Given the large number of existing incumbent EBS geographic service areas, that is 35-mile radius circles, there may not be enough vacant and available EBS spectrum in many markets to encourage competition for those markets in an auction limited to these white space areas. As noted in the *NPRM*, in many markets all that is available are “small, irregularly shaped areas between GSAs.” Another factor that may affect interest in licenses that are not overlay licenses, but rather cover vacant and available spectrum only is that, although the total available geographic area of the EBS vacant and available spectrum might be substantial (50%), the percentage of population covered by the vacant and available (slightly over 15%) may not be.

77. Another distinguishing characteristic of the EBS band is the preponderance of leasing by existing EBS incumbent licensees. While there are 2,193 active, regular EBS licenses, there are 2,046 long-term *de facto* control leases involving EBS licenses. The majority of those leases are with Sprint, but there are other lessees in the 2.5 GHz band. These leases are authorized to have terms of up to 30 years and often contain rights of first refusal or purchase options. While one commenter appears to suggest that the Commission considers terminating EBS leases to facilitate transition of the band, the Commission continues to believe that such an action would serve as an undue deterrent to the negotiation of spectrum leasing, in this as well as other bands, “thus creating uncertainty among all parties that have entered into or are contemplating agreements under the Commission’s Secondary Markets rules and policies.” Thus, the Commission must consider the impact of those leases on a potential auction.

78. The Commission is not persuaded by the objections raised in the record to offering overlay licenses at auction. For example, there is no evidence in the record supporting the allegation that the winning bidders would be motivated “to undermine existing EBS licenses serving the area, in order to obtain access to that EBS spectrum under the overlay license without having to lease it.” Moreover, incumbent EBS licensees will retain control over their licenses and the right to protection from interference from the operations of overlay licensees, their lessees, and other successors in interest.

79. Nor is the Commission persuaded by alleged disadvantages of overlay licensees. For example, Voqal asserts that in many, particularly urban and suburban, markets, only slivers of areas are available for new licensing, and that, as a result, there will be “significant technical complexity engineering a network to operate without impacting adjacent licensees.” The technical complexities that may result from an auction of overlay licenses are a by-product of its most important advantage, namely the protection of the rights and interests of incumbent licensees. As such, potential bidders will need to consider carefully these technical issues as they decide whether to participate in the auction. Voqal further argues that “allowing a new buyer to purchase this spectrum would foreclose opportunities for existing providers to cover these areas just outside the current GSAs, and that this could lead to very different levels of service in the two adjacent GSAs, which could include residents of the same county.” The Commission notes that overlay licensees will have an incentive to put to use licenses they acquired at auction and also will be required to provide service in order to meet their performance requirements. Proceeding to auction of the vacant and available EBS spectrum will permit market forces to determine the highest and best use of this spectrum.

80. *Incentive Auction.* The Commission finds that conducting an incentive auction could be particularly challenging for purposes of assigning flexible use licenses for EBS white spaces because: (1) the majority of the licensed EBS spectrum is already leased, (2) incumbent EBS licensees and potential

bidders have demonstrated little interest in participating in an incentive auction, and (3) many EBS licensees do not have authorization under state law to participate in any kind of auction. Commenters note that such “[t]wo-sided auctions are complicated, costly to the government as well as to participants, and take a long time to complete;” moreover, any repacking process would be disruptive for incumbent EBS licensees that wish to continue to provide educational services. The Commission therefore concludes that its policy objectives are better served by assigning overlay licenses subject to auction as described above.

81. Most commenters oppose an incentive auction because the vast majority of EBS spectrum is subject to long-term leases that would preclude most EBS licensees from participating in the reverse auction. They note that an incentive auction would not work from a legal or practical perspective because it would require participation from both existing licensees and their lessees. Further, commenters note that even if the terms of leases permitted licensees to participate in an incentive auction to relinquish their spectrum usage rights, and forward auction participants bid on licenses subject to the existing leases, the prevalence of long-term leases could severely limit bidders’ interest in the new licenses offered. Commenters contend that the existence of the leases lessens the likelihood that entities other than the current lessee would bid, and that it would “badly distort a potential forward auction.”

82. AT&T claims that EBS licensees would be able to participate in an incentive auction, despite existing leases, because they could negotiate a price at which lessees would give up their rights. The Commission expects that it likely would be difficult or impossible for many EBS licensees to pay commercial lessees to break their leases, as most EBS licensees are educational, non-profit entities. Although TechKnowledge suggests that the Commission could invalidate lease provisions that would prevent EBS licensees from participating in an incentive auction, unilaterally modifying contractual provisions agreed to as part of an agreement between a licensee and lessee raises serious questions of

fairness and legality. Moreover, even if such lease provisions were invalidated, many EBS licensees may still be unable to participate in an incentive auction because they lack the legal authority under state law to do so.

83. AT&T contends that the majority of entities opposing incentive auctions “have a powerful self-interest” in doing so because keeping EBS licensees confined to the secondary market prevents interested parties from knowing the value of the licenses, especially after eligibility and use restrictions are eliminated. While AT&T likely is correct that lessors and lessees have an interest in protecting existing leases, the Commission finds that such an interest is legitimate where they have relied on those leases to build their networks and where such leases have long been permitted under its rules.

84. While there is limited support in the record for an incentive auction as a way to “encourage incumbents to relinquish voluntarily some or all of their spectrum usage rights,” the Commission concludes that it can achieve much the same result with less disruption to existing licensees and lessees through an auction of overlay licenses. For example, commenters allege that, if the Commission acts on its proposals to eliminate eligibility restrictions and make EBS licenses readily transferable, an incentive auction will not be necessary to promote the transition of the band to commercial use, since the use of the spectrum is not changing. As WCAI notes, EBS licensees that wish to sell their licenses and have the ability to do so will be able to sell quickly and efficiently, and without administrative costs, via secondary markets, due to the lifting of the eligibility restrictions. In addition, as WCAI explains, not all EBS spectrum is fungible. In these circumstances, given the Commission’s decision to eliminate eligibility restrictions, an auction of overlay licenses will quickly assign licenses for EBS white spaces and promote the transition of the band with little disruption to existing users of the spectrum.



85. *Applicability of Part 1 Competitive Bidding Rules.* Substantially consistent with the *NPRM*, the Commission adopts its proposal to conduct any auction of EBS licenses in conformity with the general competitive bidding rules in part 1, subpart Q, including any modifications that the Commission may adopt for its part 1 general competitive bidding rules in the future. The Commission believes that its general competitive bidding rules are suitable to conduct an auction of EBS licenses. The limited comment the Commission received on these issues generally supports use of the general part 1 competitive bidding rules. The Commission believes its part 1 rules will allow market forces to determine its highest and best use, and thus will enable the Commission to meet its goal of spurring more efficient and effective use of the 2.5 GHz band. These rules have proven successful in numerous spectrum auctions and establish an auction process that promotes “efficient and intensive use” of this spectrum and the “development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas,” and that “recover[s] for the public . . . a portion of the value of the public spectrum resource made available for commercial use.

86. The Commission will adopt bidding credits for EBS, although the *NPRM* proposed not to apply any designated entity preferences. Based on the Commission’s experience with the use of bidding credits in recent spectrum auctions, the Commission now concludes that using bidding credits in competitive bidding for the 2.5 GHz band is an effective tool to achieve its statutory objective of promoting the participation of designated entities in the provision of spectrum-based service. In designing auction rules and procedures, the Commission takes into account both the nature of the service and the nature of the parties most likely to be interested in using the spectrum. Bidding credits have been successful in other auctions, including prior auctions of the 2.5 GHz band. The removal of the eligibility restriction and educational use requirements will attract more commercial operators to the 2.5 GHz band and bidding credits should help to facilitate greater participation in any auction of EBS licenses. The Commission now concludes that offering bidding credits to designated entities, along with

the updates to the 2.5 GHz band that the Commission adopts, strike the appropriate balance and should improve the ability of small businesses to attract the capital necessary to meaningfully participate in an auction of 2.5 GHz spectrum, best satisfying its congressional objectives. The Commission therefore agrees with the comments it received supporting the use of bidding credits in an EBS auction.

87. Consistent with the Commission’s other recent auctions, it will adopt the high two of three thresholds in the Commission’s standardized schedule of bidding credits for auction of spectrum well suited for 5G deployment. Accordingly, an entity with average annual gross revenues for the preceding five years not exceeding \$55 million will qualify as a “small business,” while an entity with average annual gross revenues for the preceding five years not exceeding \$20 million will qualify as a “very small business.”<sup>9</sup> In the *Competitive Bidding Second Memorandum Opinion and Order* (59 FR 44272 (Aug. 26, 1994)), the Commission stated that it would define eligibility requirements for small businesses on a service-specific basis, taking into account the capital requirements and other characteristics of each particular service in establishing the appropriate threshold. While the capital requirements of the services to be deployed in these bands is not yet known, the Commission believes that using these gross revenue thresholds will enhance the ability of small businesses to acquire and retain capital and thereby complete meaningfully at auction. The Commission also believes that these thresholds are not overly inclusive, and prevent designated entity benefits from flowing to entities for

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<sup>9</sup> The standardized schedule of bidding credits provided in § 1.2110(f)(2)(i) defines small businesses based on average gross revenues for the preceding three years. In December 2018, Congress revised the standard set out in the Small Business Act for categorizing a business concern as a “small business concern,” by changing the annual average gross receipts benchmark from a three-year period to a five-year period. Thus, as a general matter, a Federal agency cannot propose to categorize a business concern as a “small business concern” for Small Business Act purposes unless the size of the concern is based on its annual average gross receipts “over a period of not less than 5 years.” 15 U.S.C. 632(a)(2)(C)(ii)(II), as amended by Small Business Runway Extension Act of 2018, Pub. L. 115-324 (Dec. 17, 2018). The Commission therefore adopts the Small Business Act’s revised five-year average gross receipts benchmark for purposes of determining which entities qualify for small business bidding credits. But because the SBA has not yet revised its regulations to update the definition of “small business concern,” for purposes of compliance with the Regulatory Flexibility Act, the Commission will continue to use the SBA’s current definition of “small business,” which is based on a three-year benchmark. *See infra*.

which such credits are not necessary. The Commission will provide qualifying “small businesses” with a bidding credit of 15% and qualifying “very small businesses” with a bidding credit of 25%, consistent with the standardized schedule in part 1 of its rules. The Commission rejects the proposal for the use of three tiers of small business bidding credits because the Commission believes that this two-tiered approach has been successful in the past, and will once again use it.<sup>10</sup> The Commission believes the use of the small business definitions and associated bidding credits set forth in the part 1 bidding credit schedule will provide consistency and predictability for small businesses.<sup>11</sup>

88. The rural service provider bidding credit awards a 15% bidding credit to those servicing predominantly rural areas and that have fewer than 250,000 combined wireless, wireline, broadband and cable subscribers. The Commission will apply the rural service provider bidding credit to auction of EBS licenses in the 2.5 GHz band. The Commission believes that a targeted bidding credit will better enable rural service providers to compete for spectrum licenses at auction and in doing so, will increase the availability of 5G service in rural areas. The comments the Commission received supports the use of the rural service provider bidding credit.

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<sup>10</sup> The proposal for the use of three tiers of bidding credits lacks the necessary justification of why a third tier of bidding credits is necessary to enhance the ability of small businesses to acquire and retain the capital necessary to compete meaningfully at auction for EBS licenses. See *Incentive Auction R&O*, 79 FR 48442 (Aug. 15, 2014), 29 FCC Rcd at 6763-64, para. 477. While the Commission previously adopted three tiers of bidding credits for auction of BRS licenses, the Commission has adopted two tiers of bidding credits in the vast majority of service rule proceedings in which it has adopted small business bidding credits. Given the smaller license size of county than the BRS BTA license, and the lack of information on how a third bidding credit is necessary, the Commission believes the two tiers adopted are appropriate.

<sup>11</sup> The Commission directs the Wireless Telecommunications Bureau in conjunction with the Office of Economics and Analytics to seek further comment on the two specific small business standards the Commission adopts for determining an entity’s eligibility for small business bidding credits in an auction of unlicensed EBS spectrum. Specifically, the Commission directs WTB in conjunction with OEA to seek comment on defining a “small business” as a business with average gross revenues for the preceding five years not exceeding \$55 million, and a “very small business” as a business with average gross revenues for the preceding five years not exceeding \$20 million. The Commission further directs that WTB and OEA should consult with the Small Business Administration and obtain its approval of the adopted small business size standards in advance of any auction of 2.5 GHz EBS white spaces licenses. 15 U.S.C. 632(a)(2)(C); 47 CFR 121.903.

89. The Commission previously adopted a process for establishing a reasonable monetary limit or cap on the amount of bidding credits that an eligible small business or rural service provider may be awarded in any particular auction. It established the parameters to implement a bidding credit cap for future auctions on an auction-by-auction basis. Consistent with the Commission's longstanding approach, the Commission will initiate a public notice process to solicit public input on certain details of auction design and the auction procedures for the auction of EBS licenses. As part of that process, the Commission will solicit public input on the appropriate amount of the bidding credit cap and subsequently establish the cap that will apply for that auction, based on an evaluation of the expected capital requirements presented by the particular spectrum being auctioned and the inventory of licenses to be auctioned.

90. The tribal lands bidding credit program awards a discount to a winning bidder for serving qualifying tribal land that have a wireline telephone subscription rate equal to or less than 85% of the population. The Commission believes that tribal entities involved in the telecommunications industry face unique challenges in participating in spectrum auctions and that the tribal lands bidding credit will promote further deployment and use of spectrum over tribal lands. While the Commission is also adopting a Tribal priority window, the Commission believes the priority window and bidding credit can complement each other and help facilitate service on Tribal lands. No commenters oppose the tribal land bidding credit nor suggest that the tribal lands bidding credit is unnecessary. Accordingly, a winning bidder for a market will be eligible to receive a credit for serving qualifying Tribal lands within that market, provided it complies with the applicable competitive bidding rules.

## **2. Description of Licenses Being Offered**

91. *Geographic Area.* The Commission adopts counties as the appropriate geographic size for new licenses. The Commission finds that a county-based license will afford overlay licensees the flexibility to develop localized services, allow for targeted deployments based on market forces and

customer demand, and facilitate access by both smaller and larger providers. As noted by several commenters, counties also “nest” into Basic Trading Areas (BTA)s, and thus they are congruent with the current footprint of BRS licensees, creating consistency with the existing BRS licensing framework. As noted by supporters, licensing by county accommodates a wide variety of business models: it enables rural providers to obtain spectrum just in the area that they intend to serve, while allowing larger providers to aggregate spectrum in multiple counties as part of a larger business plan.

92. The Commission rejects the alternative of census tracts as the geographic area licensing unit. The Commission agrees with commenters opposing the use of census tracts that census tracts are extremely numerous and are dynamic in size and location, which makes them difficult to manage and organize. These commenters contend that “the numerous boundaries make RF containment problematic, a problem that would be exacerbated by the relatively higher field strength limits involved with 2.5 GHz equipment that can operate at hundreds of watts of power.” Because many census tracts would be smaller than the average coverage area of a single 2.5 GHz base station, the Commission concludes that census tracts would be unworkable.

93. The Commission also finds Sprint’s proposal to offer large-area licenses, based on either Partial Economic Areas or BTAs, inferior to basing licenses on counties. While Sprint notes that “BTA licensing in particular has the benefit of consistency with the existing BRS licensing framework,” the Commission is not persuaded that consistency with the BRS framework alone warrants adopting a larger license size for EBS spectrum.

94. *Band Plan.* The Commission adopts a band plan that will include three overlay licenses: the first license will include channels A1-A-3, B1-B3, C1-C3 (49.5 megahertz); the second license will include channels D1-D3, the J channels, and channels A4-G4 (50.5 megahertz); and the third license will include channels G1-G3 and the relevant EBS K channels (16.5 megahertz of contiguous spectrum and 1 megahertz of the K channels associated with the G channel group). A group of small rural carriers

supports this band plan. By providing applicants the flexibility to bid on three different licenses, the Commission also will provide opportunity for entities of various sizes and spectrum needs to participate in an auction. As commenters note, it is important that wide channel blocks of contiguous spectrum be available because wider blocks are necessary to provide high-speed broadband access. By creating two new wider channel blocks of 49.5 megahertz and 50.5 megahertz of contiguous spectrum, respectively, the Commission has done just that. Moreover, by creating two new licenses of almost equal size while keeping channel groups together, the Commission has made it easier for the new overlay licensees to coordinate with the incumbent EBS licensees.

95. In the *NPRM*, the Commission asked commenters to address the appropriate channel block size for future licensing and to discuss why such a channel block size would serve the public interest, and the Commission received a variety of proposals in response. While some commenters argue that the Commission should license the current middle band segment as a separate license, the Commission concludes that such an approach would be spectrally inefficient. The middle band segment was originally designed for legacy video services, which have virtually disappeared from the band. Licensing the middle band channels separately creates discontinuity, which is ill-suited for wireless broadband use in general and Time Division Duplexing (TDD)—the predominant use of the band currently—in particular. For this reason, while the Commission agrees with WCAI and Sprint that having three different licenses is appropriate, the Commission does not adopt their specific proposed band plans. WCAI suggests licenses for the lower band (A1-3, B1-3, C1-3, D1-3 and the J channels), the middle band (A-G4) and the upper band. (G1-G3 and the K channels), while Sprint proposes three licenses at (1) A1-4 and B1-4, (2) C1-4 and (3) D1-4 and G1-4. The Commission also rejects WISPA’s proposal, supported by US Cellular, for four channel blocks, (1) A1-3 and B1-3, (2) C1-3 and (3) D1-3, A4, B4, C4, D4 and G4 and (4) G1-G3. By creating separate licenses for the lower and middle parts of the band, these proposals would not maximize the 2.5 GHz band’s potential to be used for high-speed wireless

broadband services. The band plan the Commission adopts will also create two wide channel blocks of almost equal size. The Commission notes that WISPA would find the band plan the Commission adopts acceptable as an alternative, and the Commission also believes the band plan the Commission adopts is responsive to U.S. Cellular's argument that fixed wireless providers generally need 45 megahertz of spectrum to deploy in the 2.5 GHz band.

96. The Commission further finds that the EBS white space discounts from the spectrum screen also should be eliminated. In the NPRM, the Commission sought comment on whether any rule changes adopted here would warrant modification of its treatment of EBS spectrum in the spectrum screen. Although one commenter, opposing revision of the screen, argues that changes are unnecessary, several others support revising the spectrum screen. WCAI, for example, argues that retaining a spectrum screen discount "based on outdated educational use requirements and eligibility would not reflect the new reality that all EBS spectrum can be used for commercial purposes." AT&T similarly argues that changing the EBS spectrum rules and repurposing EBS spectrum would require the Commission to revise the spectrum screen to include all EBS spectrum because the changes would make all EBS spectrum "'used and useful' for the provision of mobile broadband services."

97. Although the Commission previously excluded 16.5% of EBS spectrum from the spectrum screen to account for the fact that commercial providers did not have an opportunity to gain access to EBS white space spectrum, this discount is no longer necessary. Accordingly, the Commission finds that EBS white space spectrum should be considered "available," for purposes of the spectrum screen.

98. Finally, the Commission concludes that it is no longer necessary to exclude 5% of EBS spectrum from the spectrum screen in light of its decision to eliminate the educational use requirement. While the Commission recognizes that some existing EBS spectrum leases may include terms with educational use restrictions, the Commission believes that if there are such aspects of EBS spectrum

leases that warrant further consideration, its case-by-case review of secondary market transactions is the best way to assess the impact of such spectrum lease contractual provisions in particular local markets.

### **3. Requirements for New 2.5 GHz Licensees**

99. *Performance Requirements.* The Commission adopts the performance requirements that the Commission proposed in the *NPRM*, replacing the existing substantial service regime<sup>12</sup> with a menu of specific performance requirements for EBS licensees that depend on the specific service they are offering. Going forward, EBS licensees that are required to make a build-out showing under these new standards may fulfill their final performance requirements by showing any of the following: (1) 80% population coverage for mobile or point-to-multipoint service (50% interim); (2) 40 links per million persons (one link per 25,000) for fixed point-to-point service (20 links per million interim (one link per 50,000)); or (3) 80% population coverage for broadcast service (50% interim). No other types of showing or levels of coverage will be accepted. These benchmarks will apply to both licenses won at auction and licenses granted through the Tribal priority window.

100. These benchmarks are similar to those for the AWS-3 and WCS bands (which have similar propagation characteristics) but are slightly higher (an additional 5%) to account for the maturity of technologies already developed and deployed in the 2.5 GHz band. Specifically, while the AWS-3 and WCS performance requirements were established before there were extensive operations in those bands, there are currently extensive operations and ample equipment in the 2.5 GHz band. These

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<sup>12</sup> Currently, licensees in the 2.5 GHz band, including EBS licensees, are subject to a substantial service regime of performance requirements, which were set forth in 2006 as part of the ongoing efforts to transition the band to the new band plan established in 2004. Licensees were required to demonstrate compliance by May 1, 2011. This requirement includes specific safe harbors, including 30% population coverage for mobile or point-to-multipoint use, six permanent links per million for fixed point-to-point services, and an educational safe harbor for EBS licensees specifically, consisting of 20 hours of educational use per channel, per week. *See BRS/EBS Second R&O*, 71 FR 35178 (June 19, 2006), 21 FCC Rcd at 5719-33, paras. 276-304; *see also BRS/EBS FNPRM*, 69 FR 72048 (Dec. 10, 2004), 19 FCC Rcd at 14282-84, paras. 321-22.



increased requirements will help to address the concerns of some commenters that current licensees of this spectrum are not deploying to all communities within their license areas. This approach to performance requirements is supported by several commenters who advocate for robust performance requirements, including the *NPRM* proposal specifically, as well as other commenters who generally support build-out requirements without providing specifics.

101. Some commenters suggest a more relaxed approach to performance requirements, including retaining the current substantial service regime. Other commenters support adoption of the same performance requirements as those currently applicable to BRS licensees, which are similar to the current EBS substantial service standard. The Commission rejects retaining the existing substantial service requirement for new EBS licenses, as the existing requirements are inconsistent with the build-out requirements the Commission has adopted for similar bands such as AWS. The Commission agrees with WISPA that those substantial service standards are too vague, particularly in the context of a band that has a developed equipment ecosystem. The existing substantial service requirements were adopted prior to the transition to the new band plan and at a time when there was substantial uncertainty about how the band would be used in the future. Now, the ability to use EBS for broadband is well established. Given the maturity of the ecosystem in this band, and the low thresholds and vague requirements of the previous standards, the Commission declines to continue with the substantial service regime or to adopt any minor modification thereof. In other bands, the Commission has determined that a substantial service regime, which lacks firm minimum requirements, does not adequately safeguard effective use of the relevant spectrum, and the Commission extends that conclusion to EBS. The increased requirements the Commission adopts in this *Report and Order* will address that concern more effectively than the current requirements.

102. A few commenters suggest alternatives to the *NPRM* proposal beyond retention of substantial service. The Nez Perce Tribe suggests that the “coverage target” should be 100% area

coverage, but that the actual benchmark should be determined by each licensee according to the specific terrain and circumstances of each license. Other commenters propose imposing various standards of service, such as speed or affordability, as part of the performance requirement. The Commission declines to incorporate these concepts into the new performance requirements the Commission adopts. The Nez Perce Tribe's case-by-case suggestion would result in requirements that would vary across licenses, and that, if based on a licensee's own analysis, could not be determined prior to auction. The resulting uncertainty would be unfair to auction participants, who could not reasonably anticipate the construction obligation that would accompany their new licenses. This system also would place a significant burden on licensees to justify their particular level of construction as adequate in their circumstances, rather than giving licensees a set benchmark on which to rely. The Commission also declines to incorporate any quality of service measure into the performance requirements. The Commission does not include such a requirement in any other wireless service as a condition of license renewal, and the commenters suggesting it have not provided evidence that EBS as a service is uniquely situated so as to require it.

103. The Commission declines to adopt any educational use metric for performance requirements. The potential for wireless services to support education is clear; nevertheless, this goal will be supported best by adopting stringent build-out requirements that encourage wider deployment of all broadband services, rather than by attempting to define what constitutes acceptable levels or types of educational use specifically. The few comments received on this issue illustrate the difficulty of finding a specific educational metric that encourages deployment without placing an undue regulatory burden on licensees. The robust mobile, fixed, and broadcast metrics the Commission adopts in this *Report and Order* will promote deployment of wireless services that can be used for all purposes, including education. The Commission recognizes that incumbent licensees may have relied on the educational use standard to fulfill their performance requirements in the past. Those licensees may

continue to use the substantial service standard in order to make their renewal showing, but the substantial service standard, including the educational safe harbor, will not be available to new licensees in the band.

104. The Commission also sought comment in the *NPRM* on the appropriate timeline for the interim benchmark, and the appropriate penalty for failure to meet a benchmark. In this regard, the Commission will apply the interim benchmark after four years, and the final benchmark after eight years. The penalty for failure to meet the interim benchmark will be the acceleration of the final benchmark deadline by two years, to six years rather than eight. This timeline is slightly more aggressive than WISPA's suggestion of a five-year interim and a ten-year final deadline, but the critical role of mid-band spectrum in today's spectrum environment warrants such an approach. The existing ecosystem of equipment already available in the band, and the success of recipients of waivers and STAs with expeditious deployment, also suggest that a more compressed timeline is appropriate here. This timeline and the two-year acceleration penalty are also largely consistent with the Commission's rules in other bands and will help harmonize the regulatory regime of the 2.5 GHz band with other commercial wireless services. Apart from WISPA, no other commenters offer suggestions for the timing of benchmarks or the acceleration penalty.

105. As with other wireless services, a license will automatically terminate if the licensee fails to meet the final construction benchmark. The Commission rejects as unnecessary Midco's suggestion to allow one or two 90-day cure periods in order to accommodate "difficult conditions" or "other unknown impediments." The Commission expects applicants to conduct their due diligence and plan to meet these buildout deadlines. In extraordinary circumstances, the Commission may consider waiver requests to accommodate unanticipated difficulties requiring short-term accommodations.

106. For licenses acquired via the Tribal priority window described above, the Commission adopts a different timeline. These licenses must demonstrate compliance with interim build-out levels

after two years, and final build-out levels after five years. The penalty for missing the interim deadline will be an acceleration of the final deadline by one year. This timeline will encourage deployment in underserved areas, while discouraging speculation or application mills. The equipment ecosystem in this band has matured considerably since potential licensees last had a routine opportunity to apply for this spectrum, and the cost and difficulty of deployment have eased significantly. Recent recipients of waivers and STAs in this band have been able to deploy and begin service well within a five-year timeframe. This timeline is also consistent with the recommendation from MuralNet, which developed and deployed the network for the Havasupai Tribe.

107. There are also considerations specific to the Tribal window that support this timeline for those licensees. Because Tribal applicants will be able to specify their own service area, this timeline will encourage those applicants to estimate accurately the level of deployment they will be able to achieve, rather than over-claiming and thereby precluding any other potential licensee. The Commission therefore rejects Colville’s suggestion that requirements should not be “more robust” than for other licensees, and Havasupai’s suggestion that Tribes should not be subject to any build-out requirement whatsoever. In addition, a five-year Tribal deployment timeline will enable an auction-based overlay licensee to reclaim unbuilt spectrum before the end of its ten-year overlay license term if a Tribe is unable to build, helping to ensure that the spectrum is put to use.

108. *Renewal Standards.* In 2017, the Commission adopted a unified regulatory framework for the Wireless Radio Services (WRS) that replaced the existing patchwork of service-specific rules regarding renewal, comparative renewal, continuity of service, and partitioning and disaggregation, with clear and consistent rules of the road for WRS licensees. The Commission adopts the *NPRM*’s proposal to apply the WRS framework of renewal standards to new EBS licenses, including licenses granted via the Tribal priority window. With the actions the Commission takes to make EBS more flexible and similar to other bands where the WRS rules apply, the Commission finds it is now appropriate to apply

the WRS rules to EBS. This change will harmonize the regulatory regime of the 2.5 GHz band with other bands that support commercial wireless services, and it will give licensees more clarity on their regulatory requirements and options, including the flexibility to partition or disaggregate their licenses. The record supports applying the WRS framework to new EBS licensees. The Commission believes that updating the renewal standards in this manner will encourage more rapid deployment of next generation wireless services, including 5G.

109. The Commission also applies the WRS framework to existing EBS licensees.<sup>13</sup> The Commission sought comment on this issue in the *NPRM*, and several commenters support this idea. Applying the renewal standard to existing licenses will ensure that the licensees who hold them will continue to provide some level of service and that the frequencies covered by those licenses do not lie fallow. Consistent with the Commission's treatment of other incumbent licenses that did not have a prior renewal standard, the Commission will require compliance with the renewal standard for renewal applications filed after January 1, 2023.

110. In evaluating existing licensees under these new renewal standards, however, the Commission will apply new WRS build-out standards if the Commission promulgates them.<sup>14</sup> Without

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<sup>13</sup> This includes the WRS discontinuance of service rule, § 1.953 of the Commission's rules. WCAI objects to applying the new WRS discontinuance of service rule to existing licensees, arguing that such a proposal was not made in the *NPRM*. WCAI July 2 *Ex Parte* at 1-2. In seeking comment on applying WRS to EBS, the Commission noted that WRS "replaced the existing patchwork of service-specific rules regarding renewal, comparative renewal, **continuity of service**, and partitioning and disaggregation, with clear, consistent rules of the road for WRS licensees." *NPRM*, 33 FCC Rcd at 4703, para. 53. Furthermore, in its comments, "WCA agrees with Commission that it should apply the standard WRS rules for permanent discontinuance and renewal to all 2.5 GHz licensed spectrum, incumbent EBS licenses and any new EBS licenses issued pursuant to this rulemaking." WCAI Comments at 32. As for WCAI's alternative request that it defer applying the discontinuance of service rule until January 1, 2021, the Commission finds that its general deferral of the effective date of rules in this proceeding should be sufficient, particularly since the rule will also apply to commercial BRS spectrum in the 2.5 GHz band.

<sup>14</sup> In 2017, the Commission sought comment "on whether renewal term construction obligations beyond those applicable during a licensee's initial license term would help achieve its goal of increasing the number of Americans with access to wireless communications services." See *WRS FNPRM*, 82 FR 41580 (Sept. 1, 2017), 32 FCC Rcd at 8911, para. 100. The WRS FNPRM remains pending.

prejudging the outcome of that open proceeding, the Commission seeks to harmonize the 2.5 GHz band with other bands that support commercial wireless services, recognizing that this Order transitions the band to more flexible use. For clarity, the Commission emphasizes that the old, substantial service build-out standard contained in § 27.14(o) of the Commission's rules will apply to existing EBS license renewals, unless the Commission alters the WRS build-out standards upon renewal. The Commission further clarifies that, for purposes of meeting the old renewal standard, the educational use safe harbor contained in § 27.14(o)(2) is available only to licensees that meet the old EBS eligibility standard, since that safe harbor was based on service to accredited educational institutions. If such a licensee transfers its license to an entity that does not meet that standard, the new licensee will be required to make future showings using one of the other safe harbor provisions contained in § 27.14(o).

#### **4. Dismissal of Pending Waiver Requests**

111. Upon adoption of this *Report and Order*, the Commission will dismiss, without prejudice, any pending applications for new EBS licenses. A freeze on the filing of new EBS applications was instituted in 2003 in conjunction with the Commission's proposing new technical rules and band plan for the 2.5 GHz band. The Commission has granted some waiver requests to permit the filing of applications for new EBS licenses while the freeze remained in place. There are a handful of additional requests for waiver of the EBS freeze currently pending that seek new EBS licenses. Since this *Report and Order* is instituting a new process for the assignment of EBS spectrum, the Commission sees no need to grant requests for waiver of the freeze, and therefore the Commission dismisses these pending applications without prejudice. The applicants are free to participate in the license assignment processes adopted herein through the Tribal priority window or competitive bidding, as applicable.

#### **D. Cleaning up the 2.5 GHz Rules**

112. Because the transition from the interleaved channel plan under the former ITFS to the new channel plan under BRS and EBS was completed in 2011, the Commission proposed to remove

those rule sections that addressed the transition. In light of the fact that the transition has been completed, the Commission finds that the rules are obsolete and no longer necessary, and that elimination of the rules is therefore in the public interest. The Commission also received no comments objecting to the removal of these rules. The Commission therefore adopts its proposal to remove §§ 27.1230 through 27.1239 of its rules.

113. The Commission also received no comments objecting to the Commission's proposal to make non-substantive clarifying amendments to § 27.1206 of its rules. In light of the Commission's decisions to adopt a Tribal priority window with GSAs based on rural Tribal lands, as well as its decision not to rationalize existing licenses, the Commission will amend § 27.1206 to reflect the decisions it has made. The Commission also reorganizes §§ 27.1207, 27.1208, and 27.1209 to place similar subjects together, reduce duplication, and incorporate the rule changes it has adopted for EBS. These changes do not result in any substantive changes for existing BRS or EBS licenses.

114. Several commenters have made proposals that are outside of the scope of the subject proceeding or that have been made moot by the Commission's changes to the EBS band, and thus, the Commission has not addressing those proposals herein.<sup>15</sup>

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<sup>15</sup> For example, EIBASS and NAB request that the Commission makes clear that EBS licensees are obligated to protect BAS stations in the 2483.5-2500 MHz band. NAB Comments at 1-2; EIBASS Reply at 2. EBS spectrum starts at 2502 MHz and is not adjacent to BAS spectrum. Nothing in the *NPRM* proposes changes to the technical or operational rules. Thus, there is nothing in this *NPRM* that would impact BAS stations and what EIBASS and NAB request is outside the scope of this proceeding. In addition, some commenters request that the Commissions make changes to the E-Rate program in ways that would assist educators and students. *See, e.g.*, Midco Comments at 13-14; SETDA Comments at 9-10; Utah Comments at 4; WCAI Comments at 18-19. Nothing in the *NPRM* proposed any changes to the E-Rate program. Other commenters ask that the Commission adopts new rules-such as imposing a local presence requirement on existing EBS licensees, SETDA Comments at 7, or instituting new procedures for renewal or lease approval processes for EBS licensees. Utah Comments at 2-6. With the elimination of the eligibility and educational use requirements, the Commission sees no reason to address these requests, as they are now moot. VIYA asks that the Commission automatically provides entities providing service via special temporary authority (STA) with full licenses based on their outlay of resources. VIYA Comments at 9-12. The Commission notes that VIYA's subsidiary Choice Communications has filed an application for permanent authority for the frequencies in questions. *See* File No. 0008700428 (filed June 18, 2019). The *NPRM* did not propose this, and the

**E. Effective Date of Rule Changes**

115. In order to provide applicants in the Tribal priority window with a stable licensing environment unaffected by changes to the band, the Commission will defer the effective date of the rule changes it adopts in this proceeding<sup>16</sup> (other than the rules adopting the Tribal priority window and the construction requirements rule, which will apply to the Tribal priority window) until six months from the date of *Federal Register* publication of this *Report and Order*.

**IV. FINAL REGULATORY FLEXIBILITY ANALYSIS**

**A. Need for, and Objectives of, the Report and Order**

116. In the *Report and Order*, the Commission takes steps to permit more flexible use of the 2496-2690 MHz (2.5 GHz) band by current Educational Broadband Service (EBS) licensees and to provide new opportunities for EBS eligible entities, Tribal Nations, and commercial entities to obtain unused 2.5 GHz spectrum to facilitate improved access to next generation wireless broadband, including 5G, for both educational and commercial uses. EBS spectrum currently is assigned in geographic areas of various sizes and shapes and is subject to unique use and transfer restrictions. Consistent with the Commission's goal of making additional spectrum available for flexible use, and to promote use of EBS frequencies that have been unassigned for far too long, the Commission takes steps to encourage and facilitate more efficient use of the 2.5 GHz band. These steps are not intended to curtail the spectrum usage rights of existing EBS licensees, nor to annul or disturb existing agreements between such licensees and commercial operators. Additionally, since the process for transitioning Broadband Radio Service (BRS) and EBS licensees to the new band plan was completed in 2011, the Commission

Commission believes this issue is better addressed in the context of Choice's pending application. Accordingly, the Commission will not address this issue in the rulemaking.

<sup>16</sup> The Commission also defers the modification of the spectrum screen until six months from the date of *Federal Register* publication.



eliminates the BRS/EBS transition rules. The Commission believes it is in the public interest to eliminate these regulations that are out of date and no longer necessary.

**B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA**

117. There were no comments filed that specifically addressed the proposed rules and policies presented in the IRFA.

**C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration**

118. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.

119. The Chief Counsel did not file comments in response to the proposed rules in this proceeding.

**D. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply**

120. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.” A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

121. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* The Commission’s actions, over time, may affect small entities that are not easily categorized at present. The Commission therefore describes here, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses

that are used in the regulatory flexibility analysis, according to data from the SBA's Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.

122. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of August 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).

123. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." U.S. Census Bureau data from the 2012 Census of Governments indicate that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 37,132 General purpose governments (county, municipal and town or township) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts and special districts) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category show that the majority of these governments have populations of less than 50,000. Based on this data, the Commission estimates that at least 49,316 local government jurisdictions fall in the category of "small governmental jurisdictions."

124. *Wireless Telecommunications Carriers (except Satellite)*. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The appropriate size standard under SBA rules is that such a business is small if

it has 1,500 or fewer employees. For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1,000 employees or more. Thus, under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

125. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service (BRS) systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and “wireless cable,” transmit video programming to subscribers and provide two-way high-speed data operations using the microwave frequencies of the BRS and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)).

126. *BRS.* In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of no more than \$40 million in the previous three calendar years. The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. At this time, the Commission estimates that of the 61 small business BRS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 86 incumbent BRS licensees that are considered small entities (18 incumbent BRS licensees do not meet the small business size standard). After adding the number of small business auction licensees to the number of incumbent licensees not already counted, there are currently approximately 133 BRS licensees that are defined as small businesses under either the SBA or the Commission’s rules.

127. In 2009, the Commission conducted Auction 86, the sale of 78 licenses in the BRS areas. The Commission offered three levels of bidding credits: (i) a bidder with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years (small business) received a 15% discount on its winning bid; (ii) a bidder with attributed average annual gross revenues that exceed \$3 million and do not exceed \$15 million for the preceding three years (very small business) received a 25% discount on its winning bid; and (iii) a bidder with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years (entrepreneur) received a 35% discount on its winning bid. Auction 86 concluded in 2009 with the sale of 61 licenses. Of the ten winning bidders, two bidders that claimed small business status won 4 licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses.

128. *EBS*. Educational Broadband Service has been included within the broad economic census category and SBA size standard for Wired Telecommunications Carriers since 2007. Wired Telecommunications Carriers are comprised of establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.” The SBA’s small business size standard for this category is all such firms having 1,500 or fewer employees. U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small.

129. In addition to U.S. Census Bureau data, the Commission’s Universal Licensing System indicates that as of March 2019 there are 1,300 licensees holding over 2,190 active EBS licenses. The

Commission estimates that of these 2,190 licenses, the majority are held by non-profit educational institutions and school districts, which are by statute defined as small businesses.

**E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements**

130. The Commission expects the rules adopted in the *Report and Order* will impose new or additional reporting or recordkeeping and/or other compliance obligations on small entities as well as other applicants and licensees. The Commission is not in a position to determine whether the adopted rule changes will require small entities to hire attorneys, engineers, consultants, or other professionals, and cannot quantify the cost of compliance with these rule changes. The Commission does not believe however, that the costs of compliance or the administrative requirements associated with any of the rule changes will unduly burden small entities. The Commission notes that several of the rule changes are consistent with and mirror existing policies and requirements used in similar spectrum bands. Therefore, small entities with existing licenses in may already be familiar with such policies and requirements and have the processes and procedures in place to facilitate compliance resulting in minimal incremental costs to comply with the *Report and Order*.

**F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered**

131. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

132. The Commission does not believe that the rule changes adopted in the *Report and Order* will have a significant economic impact on small entities. The proposed changes expanding the use of the 2.5 GHz band will benefit small entities as well as entities of other sizes by reducing unnecessary regulatory burdens on licensees, promoting greater spectrum efficiency, and facilitating the full use of EBS spectrum to provide advanced mobile broadband services, particularly in rural areas where this spectrum currently sits idle. Moreover, the adopted reforms will permit more flexible use of this spectrum by small and other sized entities that currently hold EBS licenses and will provide new opportunities for EBS eligible entities, Tribal Nations, and commercial entities to obtain unused 2.5 GHz spectrum to facilitate improved access to next generation wireless broadband, including 5G, for both educational and commercial uses. The Commission discusses the alternatives considered to the rules adopted below.

133. *Rationalizing the GSAs of incumbent EBS Licensees.* In the *NPRM*, the Commission proposed to rationalize the current point-and-radius license areas held by incumbents to a defined geographic area. There was both support for this approach and alternatives proposed by commenters. The alternatives considered by the Commission included expansion to county borders, using self-defined GSAs, GSAs based on granular population data, and rationalization but not any expansion of geographic area coverage. Finding the benefits, the Commission believed would result from its *NPRM* proposals are unlikely to materialize to any significant degree, and the process of rationalizing licenses is likely to be complex, time-consuming, and potentially confusing to incumbent and future licensees, the Commission declined to adopt any rationalization scheme for incumbent EBS licenses and left the existing license boundaries intact.

134. *Additional Flexibility for EBS Licensees.* The Commission adopted the *NPRM*'s proposal to eliminate the EBS eligibility requirements contained in § 27.1201 of the rules for incumbent EBS licenses, including licenses granted via waiver instead of maintaining the current requirements. This

alternative allows the Commission to bring these licenses into better alignment with the flexible use licensing policies used in similar spectrum bands, which feature open eligibility absent a compelling showing that regulatory intervention to exclude potential participants is necessary and has been an effective means of promoting more efficient and better use of the 2.5 GHz band. Small entities should benefit from this increased flexibility to assign or transfer control of their licenses to entities that are not EBS-eligible. The Commission believes that, at this point in time, licensees are in the best position to determine how to use their licenses, or, alternatively, whether to transfer their licenses to a third party in the secondary market.

135. The Commission also eliminated the educational use requirement contained in § 27.1203 of the rules as proposed in the *NPRM* after considering alternative proposals to revise and/or update the requirements to reflect the current broadband use of the spectrum. In doing so the Commission did not find that any these alternatives would facilitate broadband deployment or be workable for licensees or commercial operators. Additionally, after considering alternative proposals to maintain and increase restriction on lease terms, the Commission adopted the *NPRM*'s proposal to eliminate restrictions on EBS leases entered into under its secondary markets policies on a going forward basis which will make the rules for the 2.5 GHz band consistent with other part 27 services, incentivize build-out in rural areas, and provide additional flexibility to both EBS licensees and lessees.

136. *Local Priority Filing Window.* The Commission adopted a Tribal priority window for Tribal entities to obtain 2.5 GHz licenses on Tribal lands that are located in rural areas as proposed in the *NPRM*, enabling these entities to acquire all available EBS spectrum on their Tribal lands. This window will allow Tribal entities to address the educational and communication needs of their communities and provide much needed services such advanced wireless services, in areas that are devoid of such services. Conversely, after considering the priority filing window option for existing EBS licensees and for educational institutions that do not currently hold any EBS licenses, the Commission declined to adopt

these windows based on a belief that windows for these entities are not the best way to achieve rapid expansion and deployment of broadband in the band.

137. *Licensing of White Spaces.* As proposed in the *NPRM*, the Commission will use competitive bidding to resolve mutually exclusive applications for the unassigned EBS spectrum after the completion of the rural Tribal priority window, finding the competitive bidding alternative is consistent with the other changes made in the *Report and Order* to align EBS licenses more closely with flexible use service rules. An overlay auction was determined to be the best mechanism for assigning EBS spectrum due to, among other things, the costly nature of an incentive auction to government and other participants. Thus, the overlay auction should help minimize participation costs for small entities.

138. The procedures the Commission has adopted contain provisions to assist small entities in competitive bidding. The Commission will employ the part 1 rules governing competitive bidding design, designated entity preferences, unjust enrichment, application and payment procedures, reporting requirements, and the prohibition on certain communications between auction applicants. Furthermore, qualifying “small businesses” – those with gross revenues for the preceding five years not exceeding \$55 million – will be provided with a bidding credit of 15%, and “very small businesses” – those with average annual gross revenues for the preceding five years not exceeding \$20 million – with a bidding credit of 25%. Providing small businesses and very small businesses with bidding credits will provide an economic benefit to small entities by making it easier for small entities to acquire spectrum or access to spectrum in these bands.

139. *Geographic Area and the Band Plan for New Licenses.* The band plan adopted in the *Report and Order* will include three overlay licenses - the first license will include channels A1-A-3, B1-B3, C1-C3 (49.5 MHz); the second license will include channels D1-D3, the J channels, and channels A4-G4 (50.5 MHz); and the third license channels G1-G3 and the relevant EBS K channels (16.5 megahertz of contiguous spectrum and 1 megahertz of the K channel associated with the G channel group). This



arrangement will give applicants two wide blocks and one small block from which to choose, providing opportunity for small entities participate as well as medium and large entities with different needs.

140. *Requirements for New 2.5 GHz Licenses.* Regarding performance requirements, the alternatives considered by the Commission were broadly speaking, robust requirements (including the Commission's proposal), relaxed requirements (including the current substantial service standard), or the general concept of a build-out requirement without specifics. The Commission adopted the robust mobile, fixed and broadcast performance requirement metrics from the *NPRM* for new licensees in the band, which will promote the deployment of wireless services for multiple purposes including education. With respect to the timeline for evaluating build-out, the Commission required that the interim benchmark be applied after four years, and that the penalty for failure to make this showing be the acceleration of the final benchmark deadline to six years, rather than eight years. This approach is largely consistent with the Commission's rules for other bands and will help harmonize the regulatory regime of the 2.5 GHz band with other commercial wireless services. Additionally, the Commission will apply the Wireless Radio Services (WRS) framework of renewal standards to both new and existing EBS licensees. The Commission anticipates that updating the performance requirements in this manner will encourage rapid deployment of next generation wireless services, including 5G, which will benefit small entities and the industry as a whole.

141. *Pending Waiver Requests and Cleaning Up the 2.5 GHz Rules.* Small entities should benefit from the Commission's removal of the filing freeze for new EBS licenses, which will provide them greater opportunity to obtain EBS spectrum to meet the needs of their communities. In conjunction with removing the filing freeze, the Commission will dismiss three pending requests to waive the freeze for new EBS licenses. Small entities should also benefit from the Commission's clean-up of the 2.5 GHz rules by eliminating the BRS/EBS transition rules which were completed in 2011 and making non-substantive, clarifying amendments to § 27.1206, making it is easier to understand.

## **V. ORDERING CLAUSES**

142. Accordingly, IT IS ORDERED, pursuant to sections 1, 2, 3, 4, 5, 7, 301, 302, 303, 304, 307, 309, and 310 of the Communications Act of 1934, 47 U.S.C. 151, 152, 153, 154, 155, 157, 301, 302a, 303, 304, 307, 309, and 310, and section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. 1302, that this *Report and Order* IS HEREBY ADOPTED.

143. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

144. IT IS FURTHER ORDERED that the rules and requirements adopted herein WILL BECOME EFFECTIVE six months from the date of publication in the Federal Register with the exception of §§ 27.14(u) and (v) and 27.1204 of the rules, which contain new or modified information collection requirements that require review by the OMB under the PRA. The Commission directs the Bureau to announce the compliance date for those information collections in a document published in the Federal Register after OMB approval and directs the Bureau to cause §§ 27.14 and 27.1204 to be revised accordingly.

145. IT IS FURTHER ORDERED, pursuant to sections 4(i) and 309 of the Communications Act of 1934, 47 U.S.C. 154(i), 309, and § 1.934(d)(2) of the Commission's Rules, 47 CFR 1.934(d)(2), that the requests for waiver of the freeze on the filing of new EBS applications filed by Monterey Peninsula Unified School District and the Duckwater Shoshone Tribe ARE DENIED, and the applications filed by Monterey Peninsula Unified School District (File No. 0007664266) and Duckwater Shoshone Tribe (File Nos. 0007768145 and 0007768146) ARE DISMISSED WITHOUT PREJUDICE.

**List of Subjects in 47 CFR Parts 1 and 27**

Administrative practice and procedure, Communications common carriers.

Federal Communications Commission.

**Marlene Dortch,**

*Secretary,*

*Office of the Secretary.*

**Final Rules**

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 1 and 27 as follows:

**PART 1 – PRACTICE AND PROCEDURE**

1. The authority citation for part 1 is revised to read as follows:

Authority: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

2. Amend § 1.907 by revising the definition of “Covered Geographic Licenses” to read as follows:

**§ 1.907 Definitions.**

\* \* \* \* \*

*Covered geographic licenses.* Covered geographic licenses consist of the following services: 1.4 GHz Service (part 27, subpart I, of this chapter); 1.6 GHz Service (part 27, subpart J); 24 GHz Service and Digital Electronic Message Services (part 101, subpart G, of this chapter); 218-219 MHz Service (part 95, subpart F, of this chapter); 220-222 MHz Service, excluding public safety licenses (part 90, subpart T, of this chapter); 600 MHz Service (part 27, subpart N); 700 MHz Commercial Services (part 27, subparts F and H); 700 MHz Guard Band Service (part 27, subpart G); 800 MHz Specialized Mobile Radio Service (part 90, subpart S); 900 MHz Specialized Mobile Radio Service (part 90, subpart S); Advanced Wireless Services (part 27, subparts K and L); Air-Ground Radiotelephone Service (Commercial Aviation) (part 22, subpart G, of this chapter); Broadband Personal Communications Service (part 24, subpart E, of this chapter); Broadband Radio Service (part 27, subpart M); Cellular Radiotelephone Service (part 22, subpart H); Citizens Broadband Radio Service (part 96, subpart C, of this chapter); Dedicated Short Range Communications Service, excluding public safety licenses (part 90, subpart M); Educational Broadband Service (part 27, subpart M); H Block Service (part 27, subpart K); Local Multipoint Distribution Service (part 101, subpart L); Multichannel Video Distribution and Data Service (part 101, subpart P); Multilateration Location and Monitoring Service (part 90, subpart M); Multiple Address Systems (EAs) (part 101, subpart O); Narrowband Personal Communications Service (part 24, subpart D); Paging and Radiotelephone Service (part 22, subpart E; part 90, subpart P); VHF Public Coast Stations, including Automated Maritime Telecommunications Systems (part 80, subpart J, of this chapter); Upper

Microwave Flexible Use Service (part 30 of this chapter); and Wireless Communications Service (part 27, subpart D).

\* \* \* \* \*

3. Amend § 1.9020 by revising paragraph (d)(2)(i) to read as follows:

**§ 1.9020 Spectrum manager leasing arrangements.**

\* \* \* \* \*

(d) \* \* \*

(2) \* \* \*

(i) The spectrum lessee must meet the same eligibility and qualification requirements that are applicable to the licensee under its license authorization, with the following exceptions. A spectrum lessee entering into a spectrum leasing arrangement involving a licensee in the Public Safety Radio Services (see part 90, subpart B and §90.311(a)(1)(i) of this chapter) is not required to comply with the eligibility requirements pertaining to such a licensee so long as the spectrum lessee is an entity providing communications in support of public safety operations (see §90.523(b) of this chapter). A spectrum lessee entering into a spectrum leasing arrangement involving a licensee in the Mobile Satellite Service with ATC authority (see part 25 of this chapter) is not required to comply with the eligibility requirements pertaining to such a licensee so long as the spectrum lessee meets the other eligibility and qualification requirements of paragraphs (d)(2)(ii) and (iv) of this section.

\* \* \* \* \*

4. Amend § 1.9030 by revising paragraph (d)(2)(i) to read as follows:

**§ 1.9030 Long-term *de facto* transfer leasing arrangements.**

\* \* \* \* \*

(d) \* \* \*

(2) \* \* \*

(i) The spectrum lessee must meet the same eligibility and qualification requirements that are applicable to the licensee under its license authorization. A spectrum lessee entering into a spectrum leasing arrangement involving a licensee in the Public Safety Radio Services (see part 90, subpart B and §90.311(a)(1)(i) of this chapter) is not required to comply with the eligibility requirements pertaining to such a licensee so long as the spectrum lessee is an entity providing communications in support of public safety operations (see §90.523(b) of this chapter).

\* \* \* \* \*

**§ 1.9047 [Removed and Reserved]**

5. Remove and reserve § 1.9047.

**PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES**

6. The authority citation for part 27 continues to read as follows:

Authority: 47 U.S.C. 154, 301, 302a, 303, 307, 309, 332, 336, 337, 1403, 1404, 1451, and 1452, unless otherwise noted.

7. Amend § 27.4 by removing the definition for “Commercial EBS licensee” and revising the definition of “Educational Broadband Service (EBS)” to read as follows:

#### § 27.4 Terms and definitions.

\* \* \* \* \*

*Educational Broadband Service (EBS).* A radiocommunication service licensed under this part for the frequency bands specified in § 27.5(i).

\* \* \* \* \*

#### § 27.5 [Amended]

8. Amend § 27.5 by removing and reserving paragraph (i)(3).

9. Amend § 27.14 by:

a. Effective **[INSERT DATE 184 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, revising paragraphs (o) introductory text, (o)(2) introductory text, (o)(2)(iii), and (o)(3); and

b. Effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, adding paragraphs (u) and (v).

The revisions and additions read as follows:

#### § 27.14 Construction requirements.

\* \* \* \* \*

(o) With respect to initial BRS licenses issued on or after November 6, 2009, the licensee must make a showing of substantial service within four years from the date of issue of the license. With respect to EBS licenses issued after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the licensee must comply with paragraph (u) of this section. “Substantial service” is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might

minimally warrant renewal. Substantial service for BRS and EBS licensees is satisfied if a licensee meets the requirements of paragraph (o)(1), (2), or (3) of this section. If a licensee has not met the requirements of paragraph (o)(1), (2), or (3) of this section, then demonstration of substantial service shall proceed on a case-by-case basis. Except as provided in paragraphs (o)(4) and (5) of this section, all substantial service determinations will be made on a license-by-license basis. Failure by any licensee to demonstrate substantial service will result in forfeiture of the license and the licensee will be ineligible to regain it.

\* \* \* \* \*

(2) An EBS license initially issued prior to **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** has provided “substantial service” when:

\* \* \* \* \*

(iii) The level of service provided by the EBS licensee meets or exceeds the minimum usage requirements specified in § 27.1214 contained in the edition of 47 CFR parts 20 through 39, revised as of October 1, 2017.

(3) An EBS or BRS licensee may be deemed to provide substantial service through a leasing arrangement if the lessee is providing substantial service under paragraph (o)(1) of this section.

\* \* \* \* \*

(u) This section enumerates performance requirements for EBS licenses initially issued after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Licensees shall demonstrate compliance with performance requirements by filing a construction notification with the Commission, within 15 days of the expiration of the applicable benchmark, in accordance with the provisions set forth in § 1.946(d) of this chapter.



(1) All EBS licenses initially issued after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, must demonstrate compliance with the performance requirements described in this paragraph (u). All equipment used to demonstrate compliance must be in use and actually providing service, either for internal use or to unaffiliated customers, as of the interim deadline or final deadline, whichever is applicable.

(2) Except for licensees with licenses applied for in the Tribal Priority Window, licensees providing mobile or point-to-multipoint service must demonstrate reliable signal coverage of 50% of the population of the geographic service area within four years of initial license grant, and 80% of the population of the geographic service area within eight years of initial license grant.

(3) Except for licensees with licenses applied for in the Tribal Priority Window, licensees providing fixed point-to-point service must demonstrate operation of one link for each 50,000 persons in the geographic service area within four years of initial license grant, and one link for each 25,000 persons in the geographic service area within eight years of initial license grant.

(4) Licensees with licenses applied for in the Tribal Priority Window must make an interim showing under paragraph (o)(2) or (3) of this section within two years of initial license grant. Licensees with licenses applied for in the Tribal Priority Window must make a final showing under paragraph (o)(2) or (3) of this section within five years of initial license grant.

(5) If an EBS licensee (other than the licensee of a license issued pursuant to the Tribal Priority Window) fails to meet interim performance requirements described in paragraph (o)(2) or (3) of this section, the deadline for that authorization to meet its final performance requirement will be advanced by two years. If an EBS licensee of a license issued pursuant to the Tribal Priority Window fails to meet interim performance requirements described in paragraph (o)(2) or (3) of this section, the deadline for that authorization to meet its final performance requirement will be advanced by one year. If an EBS licensee

fails to meet its final performance requirement, its license shall automatically terminate without specific Commission action.

(v) Paragraph (u) of this section contains new or modified information-collection and recordkeeping requirements. Compliance with these information-collection and recordkeeping requirements will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the Federal Register announcing that compliance date and revising this paragraph (v) accordingly.

**§ 27.1201 [Removed and Reserved]**

10. Remove and reserve § 27.1201.

**§ 27.1203 [Removed and Reserved]**

11. Remove and reserve § 27.1203.

12. Effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, add § 27.1204 to read as follows:

**§ 27.1204 EBS Tribal priority filing window.**

(a) The Commission will specify by public notice a window filing period for applications for new EBS stations on rural Tribal Lands. EBS applications for new facilities will be accepted only during this window. Applications submitted prior to the window opening date identified in the public notice will be returned as premature. Applications submitted after the deadline will be dismissed with prejudice as untimely.

(b) Applicants in the Tribal priority filing window must demonstrate that they are eligible to file in that window. To be considered eligible for the Tribal priority window, an applicant must be:

(1) A federally recognized American Indian Tribe or Alaska Native Village; or an entity that is owned and controlled by a federally-recognized Tribe or a consortium of federally-recognized Tribes;

(2) Requesting a license on Tribal Land, which is defined to be any federally recognized Indian Tribe's reservation, pueblo or colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688) and Indian Allotments, see §54.400(e) of this chapter, as well as Hawaiian Home Lands—areas held in trust for native Hawaiians by the State of Hawaii, pursuant to the Hawaiian Homes Commission Act, 1920, July 9, 1921, 42 Stat 108, et seq., as amended; and any lands designated prior to July 10, 2019, as Tribal Lands pursuant to the designation process contained in § 54.412 of this chapter;

(3) Requesting a GSA in a rural area, which is defined to be lands that are not part of an urbanized area or urban cluster area with a population equal to or greater than 50,000; and

(4) Have a local presence on the Tribal Land for which they are applying.

(c) Following the close of the Tribal priority window, the Commission will issue a public notice of acceptance for filing of applications submitted pursuant to paragraph (b) of this section that meet technical and legal requirements and that are not in conflict with any other application filed during the window. Petitions to deny such applications may be filed within 30 days of such public notice. A copy of any petition to deny must be served on the applicant.

(d) If applications are filed in the Tribal priority window that are mutually exclusive, the Commission will use competitive bidding to resolve the mutual exclusivity. Two or more pending

applications are mutually exclusive if the grant of one application would effectively preclude the grant of one or more of the others under Commission rules in this chapter.

(e) For non-mutually exclusive applications, the applications will be processed in accordance with procedures to be specified by the Wireless Telecommunications Bureau.

(f) This section contains new or modified information-collection and recordkeeping requirements. Compliance with these information-collection and recordkeeping requirements will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the Federal Register announcing that compliance date and revising this paragraph (f) accordingly.

13. Add § 27.1205 to read as follows:

**§ 27.1205 EBS renewal standard.**

In applying the renewal standard contained in § 1.949 of this chapter to EBS, for licenses initially issued after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the applicable safe harbors are the buildout standards contained in § 27.14(u). For licenses initially issued before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the applicable safe harbors are the buildout standards contained in § 27.14(o); provided, however, that the educational use safe harbor contained in § 27.14(o)(2) may only be used by a licensee that meets the eligibility requirements to hold an EBS license pursuant to the provisions of § 27.1201(a) contained in the edition of 47 CFR parts 20 through 39, revised as of October 1, 2017.

14. Revise § 27.1206 to read as follows:

**§ 27.1206 Geographic service area.**

(a) BRS:

(1) For BRS incumbent licenses granted before September 15, 1995, the geographic service area (GSA) is the area that is bounded by a circle having a 35 mile radius and centered at the station's reference coordinates, which was the previous PSA entitled to incumbent licensees prior to January 10, 2005, and is bounded by the chord(s) drawn between intersection points of the licensee's previous 35 mile PSA and those of respective adjacent market, co-channel licensees;

(2) For BRS BTA authorization holders, the GSA for a channel is the BTA, subject to the exclusion of overlapping, co-channel incumbent GSAs created on January 10, 2005.

(3) If an incumbent BRS license is cancelled or is forfeited, the GSA area of the incumbent station shall dissolve and the right to operate in that area automatically reverts to the GSA licensee that held the corresponding BTA.

(b) EBS:

(1) *Existing EBS licensees.* (i) The GSA of EBS licenses on the E and F channel groups is defined in § 27.1216. EBS licensees on the E and F channel groups are prohibited from expanding their GSAs.

(ii) For incumbent EBS licenses not in the E and F channel groups in effect as of **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the geographic service area (GSA) is the area that is bounded by a circle having a 35 mile radius and centered at the station's reference coordinates, which was the previous PSA entitled to incumbent licensees prior to January 10, 2005, and is bounded by the chord(s) drawn between intersection points of the licensee's previous 35 mile PSA and those of respective adjacent market, co-channel licensees.

(2) *New initial EBS licenses.* (i) For EBS licenses issued in the Tribal Priority Window, the GSA consists of the rural Tribal Land (as defined in § 27.1204(b)(3)) specified in the application.

(ii) For all other new initial licenses issued after **[INSERT DATE 184 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the GSA is the county for which the license is issued, subject to the exclusion of overlapping, co-channel incumbent GSAs.

15. Revise § 27.1207 to read as follows:

**§ 27.1207 Service areas and authorizations.**

(a) Initial authorizations for BRS granted after January 1, 2008, shall be blanket licenses for all BRS frequencies identified in § 27.5(i)(2). Except for incumbent BRS licenses, BRS service areas are the 1992 version of Basic Trading Areas (BTAs) defined by Rand McNally, or additional service areas similar to BTAs adopted by the Commission. The market area for each license will be listed on the license authorization. The following are additional BRS service areas in places where Rand McNally has not defined BTAs: American Samoa; Guam; Gulf of Mexico Zone A; Gulf of Mexico Zone B; Gulf of Mexico Zone C; Northern Mariana Islands; Mayaguez/Aguadilla-Ponce, Puerto Rico; San Juan, Puerto Rico; and the United States Virgin Islands. The boundaries of Gulf of Mexico Zone A are from an area twelve nautical miles from the shoreline at mean high tide on the north and east, to the limit of the Outer Continental Shelf to the south, and to longitude 91°00' to the west. The boundaries of Gulf of Mexico Zone B are from an area twelve nautical miles from the shoreline at mean high tide on the north, to the limit of the Outer Continental Shelf to the south, to longitude 91°00' to the east, and to longitude 94°00' to the west. The boundaries of Gulf of Mexico Zone C are from an area twelve nautical miles from the shoreline at mean high tide on the north and west, to longitude 94°00' to the east, and to a line 281 kilometers from the reference point at Linares, N.L., Mexico on the southwest. The Mayaguez/Aguadilla-Ponce, PR, service area consists of the following municipios: Adjuntas, Aguada, Aguadilla, Anasco, Arroyo, Cabo Rojo, Coamo, Guanica, Guayama, Guayanilla, Hormigueros, Isabela, Jayuya,

Juana Diaz, Lajas, Las Marias, Maricao, Maunabo, Mayaguez, Moca, Patillas, Penuelas, Ponce, Quebradillas, Rincón, Sabana Grande, Salinas, San German, Santa Isabel, Villalba and Yauco. The San Juan service area consists of all other municipios in Puerto Rico.

(b) For EBS initial licenses issued after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, except for licenses issued in the Tribal Priority Window, the GSA is the county for which the license is issued, subject to the exclusion of overlapping, co-channel incumbent GSAs. For purposes of this subpart, counties are defined using the United States Census Bureau's data reflecting county legal boundaries and names valid through January 1, 2017. Except for licenses issued in the Tribal Priority Window, there shall be three initial authorizations issued in each county: one authorization for channels A1, A2, A3, B1, B2, B3, C1, C2, and C3; the second authorization for channels D1, D2, D3, JA1, JA2, JA3, JB1, JB2, JB3, JC1, JC2, JC3, JD1, JD2, JD3, A4, B4, C4, D4, and G4; the third authorization for channels G1, G2, G3, KG1, KG2, and KG3.

16. Revise § 27.1208 to read as follows:

**§ 27.1208 Geographic area licensing.**

(a) All BRS and EBS licenses are geographic area licenses. Blanket licenses cover all mobile and response stations. Pursuant to that geographic area license, incumbent licensees may modify their systems provided the modified system complies with the applicable rules in this chapter. The blanket license covers all fixed stations anywhere within the authorized service area, except a station must be individually licensed if:

- (1) International agreements require coordination;
- (2) Submission of an Environmental Assessment is required under § 1.1307 of this chapter; and
- (3) The station would affect the radio quiet zones under § 1.924 of this chapter.

(b) Any antenna structure that requires notification to the Federal Aviation Administration (FAA) must be registered with the Commission prior to construction under § 17.4 of this chapter.

17. Revise § 27.1209 to read as follows:

**§ 27.1209 Reversion and overlay rights.**

(a) The frequencies associated with BRS incumbent authorizations that have cancelled automatically or otherwise recovered by the Commission automatically revert to the applicable BRS BTA licensee.

(b) The frequencies associated with EBS incumbent authorizations with a geographic service area that have cancelled automatically or otherwise recovered by the Commission automatically revert to a co-channel EBS county-based licensee, except that if the area in question is Tribal Land as defined in § 27.1204(b)(3) and is contiguous to the GSA of a co-channel authorization issued in the Tribal Priority Window, the area consisting of Tribal Land reverts to the co-channel license issued in the Tribal Priority Window.

(c) The frequencies associated with EBS authorizations issued in the Tribal Priority Window with a geographic service area that have cancelled automatically or otherwise recovered by the Commission automatically revert to a co-channel EBS county-based authorization.

18. Revise § 27.1214 to read as follows:

**§ 27.1214 EBS grandfathered leases.**

All leases of current EBS spectrum entered into prior to January 10, 2005 and in compliance with leasing rules contained in 47 CFR part 74, revised as of October 1, 2004, may continue in force and effect, notwithstanding any inconsistency between such leases and the rules applicable to spectrum leasing arrangements set forth in this chapter. Such leases entered into pursuant to the rules formerly



contained in 47 CFR part 74 may be renewed and assigned in accordance with the terms of such lease. All spectrum leasing arrangements leases entered into after January 10, 2005, under the rules set forth in part 1 of this chapter and this part, must comply with the rules in those parts.

19. Revise § 27.1217 to read as follows:

**§ 27.1217 Competitive bidding procedures for the Broadband Radio Service and the Educational Broadband Service.**

Mutually exclusive initial applications for BRS and EBS licenses are subject to competitive bidding. For BRS auctions, the designated entity provisions of § 27.1218 apply. For EBS auctions, the designated entity provisions of § 27.1219 apply. The general competitive bidding procedures set forth in part 1, subpart Q, of this chapter apply unless otherwise provided in this subpart.

20. Amend § 27.1218 by revising the section heading to read as follows:

**§ 27.1218 Broadband Radio Service designated entity provisions.**

\* \* \* \* \*

21. Add § 27.1219 before the undesignated center heading “Technical Standards” to read as follows:

**§ 27.1219 Educational Broadband Service designated entity provisions.**

(a) *Eligibility for small business provisions.* (1) A small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, have average gross revenues that are not more than \$55 million for the preceding five (5) years.

(2) A very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years.

(b) *Bidding credits.* A winning bidder that qualifies as a small business, as defined in this section, or a consortium of small businesses may use a bidding credit of 15 percent, as specified in § 1.2110(f)(2)(i)(C) of this chapter. A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use a bidding credit of 25 percent, as specified in § 1.2110(f)(2)(i)(B) of this chapter.

(c) *Rural service provider credit.* A rural service provider, as defined in § 1.2110(f)(4) of this chapter, who has not claimed a small business bidding credit may use a bidding credit of 15 percent bidding credit, as specified in § 1.2110(f)(4)(i) of this chapter.

**§§ 27.1230 through 27.1239 [Removed]**

22. Remove the undesignated center heading “Policies Governing the Transition of the 2500-2690 MHz Band for BRS and EBS” and §§ 27.1230 through 27.1239.

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